A Lecture
ON
DELIRIUM TREMENS, ITS SYMPTOMS, PATHOLOGY, AND TREATMENT.

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(*Concluded from page 420.*)

THE *treatment* of delirium tremens has passed through various phases, and undergone various modifications, in accordance with the theories which have at different times prevailed with respect to the nature of the malady. Until within the last fifty years, it was generally looked upon as an inflammatory disease. Many of the cases which the older writers called "phrenitis" were, in fact, cases of delirium tremens. The treatment then was by bleeding and other antiphlogistic remedies, and the result was most unfavourable. In the year 1813, Dr. Thomas Sutton, of Greenwich, published a tract in which he distinguished these cases of delirium, so commonly occurring in persons of intemperate habits, from cases of inflammation of the brain and its membranes. He first applied the term "delirium tremens" to the former class of cases, and remarked upon it that the name, though not perhaps the most appropriate, would serve to convey a notion of an essential symptom of the disease, and was sufficiently explicit for his purpose. He states that from the year 1798 to 1807 he resided on the eastern coast of Kent, first as physician to the forces, and afterwards as a private practitioner. He there found that delirium tremens was treated in two very distinct ways by different practitioners; the one party employing antiphlogistic remedies, the other using narcotics: and, as he says, he "soon perceived that the latter practice carried with it all the success" (p. 5). He adopted the successful mode of practice, and, after giving it a fair trial, published a very sensible treatise on the disease. He states that in the course of three years he had treated twenty-two cases of delirium tremens, and that only four of these had died. He estimates the mortality under the antiphlogistic treatment as two out of three.

Since that time the treatment of delirium tremens by narcotics, and especially by opium, has been gradually established as the orthodox practice; and it is, on the whole, a highly successful practice. But it does not always succeed. The doctrine that opium is to be given in large doses, and repeated fearlessly until the patient sleeps, is a dangerous doctrine, and must often have led to a fatal result. There are many patients who will die from the depressing effect of opium on the heart without being made sleepy by the drug. I had this fact deeply impressed upon my mind more than twenty years ago, when I was house-physician to the hospital. A man who had taken repeated large doses of opium sank rapidly exhausted without a symptom of narcotism, consciousness remaining until within a few minutes of his death.

Recently another theory of delirium tremens has been advocated by Dr. Laycock.* This theory is that the presence of alcohol in the blood is the immediate cause of the disease, and therefore that the main object of treatment should be to eliminate the alcohol. Opium and alcohol must, according to his theory, be injurious in the treatment, since opium checks elimination, and the administration of alcohol tends to perpetuate the disease; yet, with curious inconsistency, Dr. Laycock states that a glass of wine with gruel at bedtime is a very useful soporific in the treatment of delirium tremens.

The three chief modes of treatment, therefore, which have been pursued in this disease are—

1st. The antiphlogistic, now by general consent abandoned.

2nd. The treatment by opium, which is in very general use, and often highly successful; but which is attended with peculiar risks, the nature of which I will presently endeavour to point out to you.

3rd. Dr. Laycock's eliminative treatment, with abstinence from alcohol and opium.

* Edinburgh Medical Journal, 1858-9, p. 289.

I will now tell you what, in my opinion, are the main points to be attended to in the treatment of delirium tremens, and what are the peculiar dangers which have to be guarded against.

And first, bearing in mind the tendency to suicide, the patient must be constantly and carefully watched by a judicious attendant who has the power to exercise some moral control over him. The doors and windows should be secured, and razors, knives, and other means of mischief, put out of sight and reach. He should be kept quiet and undisturbed by noise or excess of light. It is better, if possible, to avoid direct physical restraint. If the patient be violent and difficult to control, secure the services of two attendants rather than have recourse to a strait-waistcoat. I have known more than one instance of sudden death from exhaustion induced by violent struggling against the restraint of the strait-waistcoat, and I have also known more than one instance of fatal exhaustion from struggling with injudicious attendants. Not long since a medical friend called one morning and desired me to go with him immediately to see a publican whom he had just before seen with an attack of delirium tremens. On entering the room we found the patient gasping for breath and evidently dying; and we learnt that immediately after my friend had left his patient, less than half an hour before, he got out of bed and wished to leave the room. Three strong men who were present resisted his attempt to go out; a struggle ensued, and in the midst of it he suddenly fell exhausted as we saw him, and he quickly ceased to breathe. You see, then, how great is the risk resulting from violent exertion on the part of these patients, and how important it is to avoid any restraint which is likely to provoke a struggle. In some instances a patient who cannot otherwise be kept in bed will remain perfectly quiet under the restraint of the waistcoat; but while he is thus restrained he must on no account be left alone. He may begin to struggle at any moment, and this struggle may cause rapid and fatal exhaustion.

To sum up, then, what I have said on the subject of restraint, the guiding principle is to prevent any violent exertion on the part of the patient—any struggle either with the strait-waistcoat or with the attendants. A padded room, when it can be had, is the safest and most effectual means of restraint for a violent patient.

Having ensured the safe custody of the patient, we have next to consider the method of treatment. Now, in the first place, bear in mind that delirium tremens is one of those diseases from which recovery may take place without any assistance from drugs. Medicines are of great use in the treatment; but they are not essential. It is, however, of essential importance that the delirious patient should be *fed*. The history of the disease teaches us that the immediate cause of the delirium is the exhaustion consequent on a defect of wholesome nutriment; and, until this defect be supplied, all attempts to procure the wished-for sleep, which is so generally followed by a cessation of the excitement, are often useless and worse than useless.

Whatever else you do or leave undone, never neglect to feed a delirious patient. If he will take food when he first comes under treatment, give it immediately, and let it be repeated as soon as he will take it. If there be, as there often is, a disinclination for food, with nausea and a coated tongue, an emetic of ipecacuanha, followed by a dose of calomel and colocynth, or a saline laxative, will be of use as a preparation for food and for the opiate, which may best be given at bedtime. You may then give from a half to one drachm of tincture of opium, which I believe to be a better soporific in these cases than the salts of morphia; and a smaller dose may be given in three or four hours if necessary. The first object is to procure sleep. But here I wish to impress upon you the necessity of great care and watchfulness. Do not make rash attempts to force on sleep by repeated large doses of opium. These attempts will often fail to procure sleep, and they may kill the patient. It is an undoubted fact, that opium in many of these cases has no soporific effect whatsoever. And not only in cases of delirium tremens is opium uncertain in its operation. When we give opium in ordinary cases of disease as an anodyne or a soporific, we can never be sure that it will cause sleep. In a considerable proportion of cases opium *prevents* sleep, and makes the patient more wakeful than he would have been without it. Another not uncommon effect of an opiate is to cause nausea and faintness. These two effects of opium should always be borne in mind in the treatment of delirium tremens. Remember that when opium fails to act as a soporific in delirium tremens it is not inert, and must not be given in repeated large doses as if it were; while it fails to procure sleep, it may be

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exerting a powerful depressing and paralysing influence upon the heart. The symptoms of opium thus acting on the heart are these:—The patient continues wakeful, excited, and delirious, but grows rapidly weaker; the pulse becomes quick, small, and feeble; the pupils are contracted; the skin is bathed in a profuse sweat; and, if the opium be continued in large and frequent doses, the patient rapidly sinks, but remains wakeful and conscious until perhaps within a few minutes of the end. The opium in these cases acts as a powerful sedative on the heart, and in proportion as it does this it fails to exercise any soporific influence. If you find that opium is acting thus injuriously, you must immediately discontinue it, and give liberal doses of brandy, or the stimulant to which the patient has been accustomed. Full doses of quinine, too, will be of use as a tonic; and nutriment, either in the liquid or solid form, should be freely given.

It is an undoubted fact that the soporific effect of opium is often much more certain and decided when the medicine is given with some alcoholic stimulant than when it is given alone; and I have seen not a few cases of delirium tremens in which, after repeated large doses of opium have failed to procure sleep, a liberal allowance of the patient's accustomed stimulant, more especially when combined with food, has been followed by a long sleep, and this by an entire freedom from delusions and delirium. I scarcely need impress upon you that these unquestionable facts are quite irreconcilable with the hypothesis that the proximate and essential cause of delirium tremens is the presence of alcohol in the blood. If the patient refuse to take the opiate or other medicine which you are anxious to give, he may sometimes be induced to take it mixed with his beer or other beverage. Both food and stimulants may be given by the rectum in case of need; and morphia may be introduced subdermically; but this mode of giving morphia requires at least as much caution as the administration of opiates by the mouth.

Chloroform vapour has the immediate effect of quieting the delirium and excitement; but the quiescence is only temporary, and I have seen no permanent good result from it. The fat and flabby state of the heart in these cases is a bar to the incautious administration of chloroform.

When there is much flushing of the face and heat of the scalp, cold lotions or iced water in a bladder may be applied to the head with advantage.

You may have heard or read of large doses of tincture of digitalis having been given for the cure of delirium tremens. I consider this a very dangerous remedy. I have no doubt that some patients have recovered in spite of the treatment. When half-ounce doses of the tincture have been given, it is to be hoped that the digitalis was of bad quality; the patient would then, at any rate, have the benefit to be derived from the stimulant action of the rectified spirit. I have heard of several instances of sudden death after the administration of large doses of digitalis, and it is only natural that these calamitous results should not, as a rule, obtain equal publicity with the cases of apparently successful treatment. A consideration of the natural history of delirium tremens suffices, I think, to show that the treatment by large doses of digitalis is irrational and dangerous.

To sum up, then, the main practical points which I have endeavoured to impress upon you. Bear in mind that an attack of delirium tremens, as a rule, subsides in a few days without help from medicines of any kind. Let the patient be carefully watched and guarded and fed, and the excitement and delirium will gradually subside. In many instances opium is a valuable aid in the treatment, and it will often cut short the disease; but remember that it is powerful for evil as well as for good. Its use, therefore, requires much care and discrimination. Some form of alcoholic stimulant will often be of great use in calming the nervous excitement and procuring sleep. Lastly, when the patient has recovered from his attack, do not fail to impress upon him the moral lesson which his sufferings have been designed to convey. The tortures of delirium tremens are most assuredly intended to exercise a wholesome deterring influence on the self-indulgent and the intemperate, and in that light he should be taught to view them. The poet Wordsworth has given the true interpretation to such spectral visions as form so marked a feature of delirium tremens, in the following lines from his "Sonnets on the Punishment of Death":—

> "Ye brood of conscience—Spectres! that frequent
> The bad man's restless walk and haunt his bed,—
> Fiends in your aspect, yet beneficent
> In act, as hovering angels when they spread
> Their wings to guard the unconscious Innocent."

STATISTICAL OBSERVATIONS ON FRACTURES AND OTHER INJURIES.

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PUBLIC attention having been of late directed to the number of street accidents, I propose reporting from time to time on the nature and character of such injuries, as shown by the cases admitted into the accident wards of St. Bartholomew's Hospital under my care, and contrasting them with accidents from other causes.

In the male ward there are at the present moment twenty-one patients, and of these fifteen are the subjects of street or out-door accidents, the remaining six being instances of injuries received in homes, factories, and other places. These six cases may be disposed of as follows:—

John M——, aged fifty-six. Fracture of lower third of the femur, caused by a fall of twelve feet from a window into a yard.

Fred. T——, aged twenty. Extensive burn of both arms and of the face, caused by his falling, when asleep, on a fire.

James C——, aged fifteen. Burn of both thighs, caused by his falling asleep before a fire. A coal flew out, and set his trousers alight.

Giles A——, aged sixty-seven. Fracture of the patella, from a fall on the stairs.

Robert F——, aged thirty-five. Fracture of the right hip, from a fall.

Charles L——, aged twenty-six. Severe compound comminuted fracture of the right tibia and fibula, extending into the ankle-joint, with wound of the anterior tibial artery, caused by a weight of one ton of iron falling suddenly on the limb. Immediate amputation; convalescence.

All these injuries proceeded from causes for which the individual alone was responsible.

Of the remaining cases, fifteen in number, comprising accidents received out of doors, one must be excepted, the accident having occurred off Bombay.

John M'D—— received a severe blow when on board ship, in a heavy gale, from the top-sail yard. In consequence of the injury the left eye became inflamed, and the sight was lost. The injured eye affected the vision of the sound organ, and in consequence was extirpated with good result by Mr. Thomas Smith.

There are, therefore, fourteen cases left, all accidents received in the streets and roads, and of these, seven proceeded from causes referable to the individual alone—namely:

Wm. C——, aged fifty-one. Fracture of the patella, from a fall during the frost.

Samuel R——, aged fifty-nine. Severe sprain of the left knee, from missing the step of an omnibus in the act of alighting.

Alfred G——, aged twenty-three. Partial dislocation of the head of the fibula outwards, from a fall with the limb bent under him.

John S——, aged twenty-one. Sprained ankle, from the fall of some brickwork which he had been undermining.

Charles H——, aged fifty-four. Fracture of the lower third of the femur, from a fall in wrestling.

Thomas K——, aged fifty-four. Bruised foot, caused by his own cart-wheel passing over it. The horse became restive in Seven Sisters'-road.

David H——, aged fifty-four. Injury to the ankle without fracture, caused by the wheel of the van which he was conducting passing over him.

The remaining seven cases proceeded from the fault or carelessness of others, and of these five are cab accidents, two caused by carts.

Cab Accidents.

Onesiperus T——, aged seventy. Fracture of the neck of the right femur, caused by his being knocked down by a cab while walking on the kerb-stone.

James B——, aged eight. Run over by a cab. Extensive laceration of the scalp. Detachment of a flap, five inches by four in measurement.

Henry A——, aged twenty-five. Injury, without fracture, to the hip. Knocked down on the pavement by a cab.

Edward M——, aged sixty-seven. Fracture of the tibia and fibula; severe bruising of the integument, from a cab having knocked him down. The horse trampled on him.

John E——, aged seventy-three. Severe comminuted fracture of the os calcis, with laceration of the integuments of the heel, and complete severance of the tendo-Achillis, caused by a cab-wheel passing over it. In this case the wound has sloughed, the patient was delirious, but is now likely to recover.

Cart Accidents.

Wm. L——, aged fourteen. Knocked down by a cart. Bruise of the right arm.

Alfred D——, aged nine. Fracture of the right femur through the lower third, caused by a cart-wheel passing over it.

All the patients are convalescent.

The injuries received by women differ in some important respects from those received by men. An analysis of twenty cases yields the following results:—

Harriet H——, aged twenty-four, was stabbed in the chest by a man with whom she was quarrelling. The exact cause of the disturbance could not be ascertained. Many persons were involved, and the quarrel continued many hours; it originated in jealousy.

Eliza C——, aged twenty-four. Fracture of the jaw from a blow, supposed to have been given by her husband.

Louisa C——, aged thirty-seven. Compound fracture of both thighs, and fracture of the left great toe; compound fracture of both arms; severe cut of head and eyebrow. She sprang from the parapet of a house in a fit of mania. Death.

Anne J——, aged fifty-five. Fracture of the os calcis, with separation of the fragments, from slipping off a step.

Mary W——, aged seventy-one. Severe cut-throat, self-inflicted; insanity; death.

Injuries received in parturition. To be removed to another ward.

Mary D——, aged forty. Vesico-vaginal fistula, admitting three fingers; prolapsus of the bladder; obliteration of the urethra.

Mary R——, aged twenty-two. Supposed fistulous passage between the vagina and rectum, proceeding from her first confinement two years and a half ago. Examination at present impracticable, on account of ulceration of the external organs.

Burns and scalds.

Rose M——, aged thirteen. Burns of legs and arms from falling asleep over the fire.

Charlotte H——, aged thirty. Extensive burn of arm and chest, caused by her falling into the fire in a fit.

Thomas W——, aged ten months. Burn on both hands while being carried by the father from a house on fire.

Mary N——, aged seven. Extensive burn over the whole body; clothes caught fire; death.

Injuries received in the streets (three in number).

Alice M'G——, aged fifty. Bruise of lower extremities. Knocked down by a van.

Mary K——, aged sixty-seven. Lacerated wound of the arm. Knocked down by a van.

Anne P——, aged twenty-three. Bruise of the ankle. Knocked down by a cab. In the fall she received a severe cut in the nates from the steel of her crinoline.

Injuries received within doors.

Ronzo Z——, an Italian boy. Fracture of the thigh from trying to walk alone in his father's shop.

Anne M——, aged forty-six. Cut head from fall down-stairs.

Charlotte W——, aged forty-six. Sprained ankle from fall.

Catherine M——, aged eighty-two. Cut head from fall down-stairs.

Alice G——, aged thirty. Simple fracture of the tibia and fibula, from a kick, supposed by her husband.

Georgina H——, aged seven. Bruised elbow, from a fall.

Queen Anne-street, Cavendish-square, April, 1866.

AFTER all the maladies which have attacked useful animals, the noxious animals now suffer in their turn. The reptiles confined in the Jardin des Plantes have, some of them, been carried off by disease, and a post-mortem examination has revealed the presence of worms in the lungs. Other reptiles have been attacked by typhus and have died.—*Land and Water.*

REMARKS

ON THE

SYMPATHY BETWEEN THE AUDITORY CANAL AND THE LARYNX.

BY CORNELIUS B. FOX, M.D. EDIN., M.R.C.P. LOND.

THE study of the sympathetic sensations and actions of the human body is one of great interest, not only on account of their number and variety, but in consequence of the obscurity with which so many of them are surrounded. The great importance of a thorough knowledge of this somewhat intricate subject to every medical man is so obvious as to require no demonstration. The sympathy between the ear and distant organs, such as the larynx, liver, uterus, spleen, &c., is adverted to in many old medical works; but the very general nature of the statements made, and the want of accurate investigations into these supposed connexions, oblige us either to accept the assertions *cum grano salis*, or seek to discover the amount of truth involved in them. The sympathy existing betwixt the ear and the larynx in some individuals, although well known to the older writers, would seem to have been overlooked by modern authors. One of the problems of Cassius Medicus was the following: "Why does irritating the ears—as, for example, with a speculum—cause sometimes a cough, just as if the trachea was irritated?" Whytt, in his work on the Sympathy of the Nerves, published in 1767, refers to it, and states that when the trachea has been rendered more sensitive than usual by a catarrh, cough is more readily produced by irritation of the auditory canal. His explanation of this, as well as of other sympathies, need not be referred to, on account of the well-known erroneous nature of his views respecting the influence of the mind on vital phenomena. Coming down to more recent times, we find that Kramer, in his work on Diseases of the Ear, published in 1837, makes the following solitary observation: "Tickling and scratching the meatus excite in the larynx a troublesome irritation to cough." Romberg states that "pruritus of the external meatus auditorius, from hyperæsthesia of the auricular branch of the vagus, is sometimes observed, and is accompanied with cough and vomiting."* The only references to this subject with which I am acquainted, in the principal recent works on medicine, are the following. Dr. C. J. B. Williams, in his Principles of Medicine, whilst enumerating the reflected and sympathetic sensations, writes: "Touching the external auditory meatus causes a tickling sensation of the epiglottis." Toynbee, in his work on Diseases of the Ear, says: "In certain cases, the presence of a foreign body in the meatus gives rise to coughing, and even to vomiting—symptoms which seem traceable to irritation of the auricular branch of the vagus nerve." Yearsley refers in very general terms to the alterations of the voice, as regards its pitch and quality, which occur in cases of deafness dependent on diseases of the ear, but does not otherwise allude to this connexion. Turning from the aurists to the laryngoscopists, we meet with no better success, so finally resort to a work on Cough,† in which, amongst the occasional causes of this symptom, are to be found dyspepsia, giving rise to "stomach cough," hysteria, affections of the tonsils and uvula, uterine derangements, teething, worms in the intestines, organic and functional affections of the heart, disease of the liver, &c. Although irritation of the auditory canal is not referred to as a cause, yet we know that cough is occasionally *idiopathic*, which means in reality that we are sometimes entirely unable to discover the cause concerned in its production.

"Felix qui potuit rerum cognoscere causas."

Let us, then, endeavour to assist in the determination of every "fons et origo mali," that so we may as soon as possible expunge from our vocabulary the term "idiopathic." In my Graduation Thesis, "Concerning the Laryngoscope and some Laryngeal Diseases" (June, 1864), presented to the University of Edinburgh, reference was made to the sympathy subsisting between the external ear and the larynx; and an explanation of this interesting connexion was advanced. The advisability of a careful examination of the auditory canal was also urged

* Vide a review of his Lehrbuch des Nervenkrankheiten des Menschen in the British and Foreign Medical Review, April, 1844.

† Semple on Cough, its Causes, Varieties, and Treatment.

in all cases where an obstinate cough, whether laryngeal in character or otherwise, obtrudes itself as a prominent symptom. Further observation in this country and on the Continent has convinced me that a state of hyperæsthesia of the nerve supplying the external auditory meatus is of frequent occurrence, and that a cough solely dependent on the existence of some irritation in that canal is by no means rare. I am well acquainted with a healthy gentleman, of nervous temperament, who has been annoyed, as long as he can remember, with a feeling of irritation in the larynx whenever he has introduced an earpick for a short distance within his left auditory canal. This sensation excites a violent cough of a suffocating or convulsive character. The organs of hearing appear on examination to be perfectly healthy, the sense being somewhat more acute on the affected side than on the other. A careful examination of his larynx by means of the laryngoscope assured me of the absence of any abnormality whatsoever. He finds that the excessive use of his voice, as in long-continued singing, produces a pain in the ear, which extends into the zygomatic fossa, and along the lower jaw towards the chin. Notes of a case are in my possession, too copious, however, to be transferred to this paper, in which a cough was solely produced by an irritation of the auditory canal in a healthy-looking woman of fifty years, who had spent much and profited nothing in her attempts to remove it. She had suffered from cough for eighteen months. The voice was unaltered, the cough was laryngeal in character, and most distressing. The throat, lungs, and other viscera were healthy. The larynx was shown by the aid of the laryngeal mirror to be normal, with the exception of a slight exaggeration of the usual rose tint of the parts. She complained of deafness in the right ear, the symptoms being those of an accumulation of cerumen. On examining the auditory canal, a large plug of hardened wax was found, and removed by means of injections. The appearance of a small amount of purulent discharge led to a further examination, resulting in the discovery of a small oval ulcer on the floor of the canal about one-eighth of an inch from the tympanic membrane. Almost immediate relief of the cough followed the extraction of the wax. After two or three applications of a solution of nitrate of silver to the ulcer, cicatrization was complete, and the woman was not only entirely free of the aural affection, but of the troublesome cough occasioned by it. Toynbee* refers to a patient under his care who suffered from a most intractable cough. He had a portion of dead bone in his external auditory meatus, which was removed. The withdrawal of this source of irritation was attended by an immediate disappearance of the cough, which no remedies had been able to subdue.

The sympathy between the ear and the larynx is manifested only in certain individuals, as has been already intimated. With the object of ascertaining the proportion of those subject to this peculiarity, eighty-six men and women have been recently examined by myself and others under my direction. This sympathetic connexion was found to exist in fifteen persons, which is equivalent to about seventeen per cent. There was only one in whom irritation of the auditory canal produced vomiting, and in this case some doubt was attached to the statement.

Two of the extracts above given refer to the nerve of the ear concerned in the production of this interesting sympathy. Romberg, whose opinion is endorsed by that of Mr. Toynbee, states that the auricular branch of the vagus is the nerve involved. This view is most undoubtedly erroneous, for *this branch* of the vagus is *not* distributed to the auditory canal, as they seem to imagine, but to the *posterior part of the pinna*. The external auditory meatus is supplied with nerves from quite a different source—viz., from the auriculo-temporal branch of the inferior maxillary division of the fifth cranial nerve, whilst the tympanic cavity and its contents are furnished with nerves from this same fifth nerve, the glosso-pharyngeal and facial trunks, through the medium of the tympanic plexus and otic ganglion. If in those cases where an increased sensibility of the auditory canal is present during life, a prolongation into that tube of the tympanic branch (Jacobson's nerve) of the glosso-pharyngeal could be demonstrated after death, the intimate connexions of this nerve with the vagus would most readily account for the sympathy betwixt the auditory canal and the larynx. Kölliker tells us that the terminations of the tympanic nerves are unknown, and alludes in his "Microscopic Anatomy" to a statement made by Sappey to this effect—that the chief nerve of the membrana tympani is derived from the vagus, and lies in its outer layer of cutis. My own dissections have not tended to confirm the opinion of this anatomist. The nerves concerned, then, in this sympathetic connexion between the auditory canal and the larynx are, without doubt, the branches of the auriculo-temporal of the fifth cranial nerve on the one hand, and the vagus, from which source the larynx is alone supplied, on the other. It is well known that an irritation of the peripheral extremity of one branch of a nerve will sometimes excite an irritation at the periphery of another branch of the same nerve, which is distributed to another part—e. g., a toothache is often accompanied by pain in the ear, both pains being relieved by the introduction into the auditory canal of a little laudanum or chloroform; the earache is aggravated, however, by the application of cold to the tooth, and disappears on its extraction. Irritation of the gastric branches of the vagus by improper food will sometimes give rise in children to reflex spasm of the glottis; irritation of the pulmonary branches of the same nerve by enlarged bronchial glands to a violent convulsive cough. We know also that an impression at the peripheral extremity of a sensitive nerve may produce such a change in that part of the nervous centre from which it arises as to excite a motor or sensitive nerve implanted near to it; and that if a sensitive nerve be stimulated at its origin in the brain, a sensation is produced which is referred to its peripheral extremity. If a motor nerve be in this manner excited a reflex action results, amongst the numerous examples of which that of winking may be cited. The afferent nerve is in this case a branch of the superior maxillary division of the fifth cranial nerve, and the efferent, or motor nerve, is the portio dura. The pain over the brow, sometimes induced by the swallowing of ice or cold water, at others by a derangement of stomach digestion, furnishes us with an example of a reflected sensation. The sympathy between the ear and the larynx affords us another instance. The impression produced by irritation of the auditory canal, in those who are the subjects of this peculiarity, is probably conveyed by the auriculo-temporal branch of the inferior maxillary division of the fifth cranial nerve to the deep origin of its sensitive root, which is in close proximity to the deep origin of the vagus in the floor of the fourth ventricle. Here a change is in all probability effected in the grey matter, which results in the stimulation of the root of the vagus. The irritation is referred to the larynx, because the medulla oblongata is wont to receive impressions from that organ through this nerve. As a consequence, the expiratory muscles necessary for coughing are set in action to free the larynx of the *supposed* irritation. Sometimes the cough is accompanied by vomiting—an action which not only results from irritation of the peripheral extremity of the vagus, as when emetics produce it, but from an excitation of the cranial origin of this nerve. The cough from teething, which it is so important to diagnose from that of croup, bronchitis, &c., and which usually ceases as soon as the gum lancet has been judiciously employed, furnishes us with a third example of a reflected sensation. Dentists appear to be well acquainted with the fact that a continued irritation of the dental branches of the fifth cranial nerve will sometimes produce a cough at almost any age, and that in such cases the stump of a tooth is frequently the cause of this annoyance.

With reference to the implantation of the roots of the fifth cranial nerve and the vagus, it may be observed that Stilling, in his work on the Medulla Oblongata and Pons Varolii, describes certain special deposits of grey matter or nuclei in the floor of the fourth ventricle, and states that they are the deep origins of the spinal accessory, vagus, glosso-pharyngeal, and hypoglossal nerves. Engravings are given representing the nuclei of the vagus and glosso-pharyngeal in juxtaposition. Langenbeck and Förg hold, however, that the accumulation of grey matter considered by Stilling to be the deep origin of the glosso-pharyngeal nerve is not so, but is in truth the nucleus of origin of the greater or sensitive root of the fifth cranial nerve. Although unanimity of opinion does not yet prevail as to the exact origin of the greater root of this important nerve, it would seem to have been traced beyond a doubt into the floor of the fourth ventricle, from which the vagus also arises.

Reference is made in the quotations given at the commencement of this paper to the occasional occurrence of vomiting when the external auditory meatus is irritated. Although the majority of aurists have omitted in their works any mention of the intimate sympathy between the ear and the stomach, yet cases very frequently arise where a derangement of the digestive organs is the sole cause of deafness. Yearsley, however, in his "Deafness Practically Illustrated," treats of "stomach deafness;" and justly wonders at the omission, especially as the sympathy between the eye and the stomach has been long recognised in the occasional production of amau-

* Op. cit.

rosis by dyspeptic disorders. Arnold furnishes us with an interesting example of this sympathy between the ear and the stomach in the case of a child who suffered from chronic vomiting which defied for a long time all curative measures, but was immediately removed on the extraction from each ear of a bean which had been introduced in play.

There is on record a case of dysphonia caused by spasm of the left true vocal cord, and accompanied by pain in the left ear. This spasm was considered to depend, in all probability, on the pressure of the left vagus, where the recurrent laryngeal branch is given off, by an aneurism; but several examinations failed in eliciting any proof of the existence of a tumour. The patient complained bitterly of the pain in the ear, and stated that it was "a piercing pain right inside"—endeavouring to enforce his remark by inserting his finger in the meatus. No allusion is made by the reporter of the case to the condition of the auditory canal, which was probably not examined.

Dr. Gull states that pain in the ear is not uncommon in connexion with thoracic aneurisms. My own experience, however, does not support this opinion; for only once have I encountered aural pain in connexion with that disease. Although the presence of a tumour was not demonstrable, yet all the symptoms undoubtedly pointed to the existence of some body pressing on the left recurrent laryngeal nerve in its thoracic course. The irritation by the same tumour of one or more of the numerous pulmonary or cardiac branches of the vagus in such close vicinity would readily account for the pain in the ear. The explanation already given of the sympathy between the ear and the larynx applies in this case, if the direction from which the impression starts be reversed.

In conclusion, the foregoing observations may thus be summed up:—

1. The sympathy between the ear and the larynx, as well as the stomach, has been long known, although the majority of recent writers seem to have overlooked it.

2. This sympathy is not manifested in every individual, but in about seventeen per cent., and seems to depend on a state of hyperæsthesia of the nerve which supplies the auditory canal.

3. The nerve of the ear concerned in the production of this phenomenon cannot be a branch of the vagus, as Romberg and Toynbee have affirmed, but is in all probability a branch of the fifth cranial nerve.

4. This sympathy is an example of a reflected or sympathetic sensation, in which the connexion between the nerves concerned takes place in the nervous centre.

5. Cases occasionally occur where a cough is solely dependent on the existence of some source of irritation in the auditory canal.

6. The explanation of the sympathy between the ear and the larynx enables us to understand the mode in which pain of the ear becomes occasionally a symptom of a thoracic aneurism.

One of my chief objects in bringing before the notice of my professional brethren this sympathetic connexion is to introduce to them what may be called an *ear-cough*, and to strongly advise them to examine the auditory canals in all cases of obstinate cough, where none of the more frequent causes of this symptom can be discovered.

Scarborough, April, 1866.

ON GENERAL DIPHTHERIA.

By JAMES FOWLER, Esq., M.R.C.S.,

HON. SURGEON TO CLAYTON'S HOSPITAL AND DISPENSARY, WAKEFIELD.

In addition to an unusual number of cases of scarlatina and erythematous sore-throat in this district, there have lately been several of true diphtheria. At the beginning and height of the epidemic, though there was considerable prostration, the local symptoms were most characteristic—limited in a general way to the fauces, and accompanied by well-marked fibrinous exudation, slowly thrown off, and re-formed many times, perhaps, before the issue of the case either in death or recovery. Latterly, however, such isolated manifestations have been less frequently observed. Instead, alarming general depression has been accompanied by a peculiar kind of inflammation, varying much in its intensity, in the organ which it primarily affects, and in the amount of fibrin which it deposits; but constant in the suddenness of its appearance, the insidiousness and ungovernableness of its progress, and the speedy fatality of its termination. Good illustrations of both forms occurred in an outlying, ill-drained village, built partly round a large sheet of almost stagnant water, strongly impregnated with decaying vegetable matter; bronchocele being so common here that it may almost be said to be endemic. It must be added, however, that scarcely less serious instances have been noticed in the town itself, and in situations where not only the circumstances and occupations of patients, but the drainage, ventilation, and construction of their homes, were everything that could be wished. The following is selected, not only on account of the infrequency of such cases, and the still greater scarcity of adequate records of them, but because there are several accidental circumstances connected with it which add materially to its interest.

Mary A——, aged thirty-nine, of temperate and regular habits, at home with a married sister in one of the healthiest parts of the town, without having been at all exposed to cold or wet, went to bed on March 19th complaining of a little sore-throat, with hoarseness and difficulty of swallowing. Of this, however, thinking it proceeded from cold, she took no notice until towards morning, when it became much worse, and increased until about eight A.M. on the 20th, when I was sent for, and found her propped up in bed, breathing noisily and with much difficulty. There neither was nor had been any cough or expectoration of any kind, but she was very anxious and prostrate, and spoke huskily or in a whisper, evidently with much pain and effort. Placing her finger on the pomum Adami as the seat of chief suffering, she said, "It is all here—choking." The mouth could not be got sufficiently wide open for the throat to be properly examined, the parotid and submaxillary glands on the right side being swollen and tender; but there was evidently a good deal of diffused redness in the fauces, especially about the tonsils. There did not appear to be any mischief in the chest; but it was difficult to speak accurately for this, as loud croupy laryngeal breathing quite hid all finer sounds in whatever part of the chest the stethoscope was placed.

Under the impression that I had got to deal with a case of acute laryngitis, I simultaneously fomented the throat with hot water and sponges, applied blistering liquid to the back of the neck, and gave forty grains of powdered ipecacuanha in water. The dose was swallowed only with much pain and difficulty, and, though repeated in ten minutes, produced neither the slightest attempt at vomiting nor the least improvement in the breathing. The latter was, in fact, so much worse at the end of half an hour, the pulse so rapid and yet so faint and irregular, the countenance so pale and dusky, that suffocation seemed imminent, and laryngotomy was accordingly performed. There was nothing remarkable in the operation; only slight bleeding occurred, and that ceased the moment the larynx was opened. The relief obtained, though very considerable, was not perfectly satisfactory. The breathing was at once made quite easy, and, as a large canula was used, almost noiseless; the pulse, though still very soft, became regular, fuller, and less frequent; but the countenance had a cadaverous expression, and sallowness and anxiety marked on it, for which there was no adequate explanation, especially as the chest was found (and it could now be examined accurately) perfectly healthy. Four hours afterwards, in order to obtain efficient nursing and attendance, she was removed in a close cab to the hospital—a distance of only a few hundred yards; and wrapped in blankets, with a couple of large sponges previously immersed in boiling water applied to the throat, every possibility of a chill being taken was avoided; the skin was, indeed, very soon after, quite moist and perspiring. There being considerable inflammation of the tonsils, besides external swelling and infiltration of the subcutaneous areolar tissue in front of the neck, with swelling and tenderness of the lymphatic glands on both sides, six leeches were applied, which gave immediate relief, at least so far as the pain was concerned. But before evening it was evident that a smart attack of bronchitis was impending, loud rhonchi being audible all over the chest. The room was accordingly kept uniformly at 60° F., and the air saturated with watery vapour, at the same time that diaphoretic doses of antimony were given, and the bowels cleared by calomel and salts.

The night was passed restlessly, and a careful examination in the morning (March 21st) showed that the inflammation had spread to the smaller tubes throughout the chest; the larger ones by this time containing viscid mucus, which was expectorated with great difficulty. The back of the left lung, besides, was dull; but all fine auscultation was out of the question, loud rattles, and growling, groaning, and snoring

sounds, being mixed discordantly, and hiding anything less obtrusive. There was evidently great pain in both sides and across the chest; and respiration was performed, with difficulty, about 42 times in the minute. Pulse 116, small and thready. Tongue very thickly coated with brown moist fur. Temperature of body, 99·75° F. Egg, wine, and beef-tea were given freely through the day, and had by this time become absolutely necessary.

The night was again passed restlessly, and in the morning (March 22nd, ten A.M.) all the unfavourable symptoms had much increased in severity. The pulse was very unequal and irregular, and at the same time so feeble and rapid that it could not be counted; and the breathing was hurried, and very badly done. The heart beat very tumultuously, a soft bellows murmur accompanying each systole. In other parts of the chest nothing could be heard but a loud medley of moist and dry sounds. Percussion was not used, because of the great pain which an attempt occasioned. The temperature of the body was taken very carefully, and found to be 99·6° F. There was total suppression of urine. She was evidently sinking rapidly; but the countenance, though pale and somewhat jaundiced, was particularly expressive, indicating the deepest anxiety; and the intellect, which was remarkably acute for a person in her station, remained perfectly unclouded until within half an hour of death, which took place at two P.M., calmly and very gradually.

Post-mortem examination.—The submaxillary region on the right side was much swollen and hardened; the skin in front of the neck in places congested and livid; and the subcutaneous areolar tissue infiltrated with bloody serum. The tonsils and mucous membrane of the top of the pharynx were tumid and of a deep-claret colour; roughened by recent deposit of soft and inelastic fibrin, nowhere thick enough, however, to be readily peeled off, or merit the title of false membrane. The œsophagus itself was healthy; but the submucous tissue at the back of the larynx was deeply infiltrated by a yellowish-grey pasty material, which, like the surface pellicles, was found under the microscope to consist entirely of nucleated cells embedded in a granular or amorphous substance like ground glass in appearance, devoid of fibrillation—at least no fibres or trabeculæ could be made out at all distinctly. Leaving the digestive system unaffected, the inflammation passed down the larynx and trachea, the mucous membrane of both which was throughout either deep-red or mahogany-coloured, except here and there, where it appeared whitish-grey or yellowish, in consequence of the deposit being thicker and more opaque. The aperture of the glottis, though pervious, was much narrowed by œdematous swelling, and, together with the epiglottis and arytenoepiglottidean folds, coated with loose, flocculent, or shreddy fibrin. The epiglottis itself was much thickened, tumid, and more rigid than natural. The whole of the mucous membrane of the bronchial tubes, even down to the last ramifications, was deeply injected and roughened by recent deposit; but much mucus or fluid of any kind was not found, what little there was being transparent and extremely adhesive. Both lungs were intensely congested, especially behind and below, where hepatization was complete, pieces sinking like stones on being thrown into a basin of water. A little lung in front and towards the apex on the right side was crepitant, and, though very dark-coloured externally, allowed a quantity of frothy serum and blood to escape on being sliced. Both pleuræ were universally lined with recently-deposited lymph, and distended with straw-coloured, flaky serum, except where there were adhesions. The pericardium was also inflamed, tensely distended with clear yellowish fluid, and glued to the diaphragm; lined internally with rough, warty fibrin. The heart itself appeared healthy. The liver was a uniform mass of hobnail, but indicated no recent alteration, except that it was gorged with bile, with which, also, the gall-bladder was distended. The spleen was about three times the natural size, and softened. The kidneys were both of them enlarged and congested, the right particularly so. The bladder was pale and contracted, but with a catheter about two drachms of urine were drawn off into a test-tube. The mucous membrane of the vulva and vagina had apparently been recently inflamed, though no complaint of this was made during life, and fibrin was deposited in considerable quantity. On warming a portion of the urine, first a cloud of lithate of soda disappeared, and then the whole became semi-solid from deposition of albumen. Dilute nitric acid added to this produced no change. On examining the rest microscopically, it was found to be so loaded with columnar epithelium, apparently from the ureter, besides containing flatter forms from the kidney and bladder, with many mucus cells, that one could scarcely help suspecting there must have been inflammation, at least of the ureter. There were also many particularly transparent tubule-casts, but no blood could be identified.

The above description, selected, as has been already explained, on account of its containing several accidental points of interest, brings out notwithstanding the following essential particulars and properties of diphtheria in a very striking manner:—

1. Fibrinous exudation coextensive with inflammation, whether of the fauces, tonsils, pharynx, larynx, trachea, bronchial tubes, lungs, pleuræ, pericardium, kidneys, vulva, or vagina.

2. Absence of any trace of suppuration, ulceration, or sloughing.

3. Enlargement of glands and infiltration of cellular membrane in the neck.

4. Universal depression from the first, and lowness of temperature; the latter never rising above 99·75° F., whereas in an ordinary pneumonia or pleuritis it would have been at least from 104° to 106°.

5. Incipient nephritis; suppression of urine; albuminuria; and the presence of peculiar casts in the urine.

In conclusion, I must thank my friends, Dr. Mercer and Mr. Milner, of Wakefield, for assisting me to make the autopsy in this case.

Wakefield, April, 1866.

ON HYPERTROPHY OF THE TOE-NAILS.

BY GEORGE LEWIS COOPER, ESQ., F.R.C.S.,
SURGEON TO THE BLOOMSBURY DISPENSARY.

THE nails situated on the dorsal surface of the fingers and toes consist of the same cellular structure as the epidermis, with the exception of certain modifications. They are an appendage of the skin, firm and elastic in structure, at the same time are covered to a certain degree by folds of the cuticle, and are received into a hollow bed termed the matrix, whence they are supposed to derive their nutrimental cells and means of growth. These cells vary in their form, some being rounded, others elongated, or even flattened, and convey to the nail by their renewal an increase in its length and density, and, when completed, their perfect and laminated appearance. On observing the nature and characters of the nail in health or disease, we may remark considerable changes to take place in their form and structure, so as to enable us to determine these appearances as indications of a healthy or of a diseased action. Thus in health we find the nails to be of a pinkish colour, firm and dense in substance; but in phthisis they assume a paler hue, are delicate in consistence, and tapered or elongated in form, following the direction of the last digital phalanx. In cholera their colour is changed to a bluish or leaden hue; and in tertiary syphilis to that of a dark, unhealthy aspect, with ragged and irregular edges. In onychia maligna they become brownish, unhealthy, and of a low vitality; but in hypertrophy they are completely changed in structure, form, and density, having assumed all the attributes of horn, both in shape and consistence, which the accompanying drawing will clearly show. It is a case of hypertrophy of the

nail of the big toe of the right foot of a woman, which was removed by me, affording us at the same time the interesting fact of its hereditary tendency.

Jane P——, aged thirty-seven, married, and has four children. States that she has never suffered from syphilis, and has enjoyed almost uninterrupted good health, but now sadly complains of the horny condition of her big toe-nails, creating much pain and suffering; that of the right foot being of considerable size, and more developed than the left, but in substance that of perfect horn, curled and bending over the upper surfaces of the two adjoining toes. She relates the facts that her father was similarly afflicted, and that "her sister has precisely the same kind of big toe-nail." In consequence of the pain created by the pressure of a boot, she has consented

to the removal of one nail, but prefers the extraction of the other to be postponed to some future day. Accordingly, with the assistance of my friend and pupil, Mr. Grinfield Coxwell, I divided the matrix in its centre, and slightly loosened the horny structure from its attachments, when by a sudden avulsion it came away without any difficulty. She is doing well.

Woburn-place, April, 1866.

ANSWERS TO INTERROGATORIES ON ENTERIC FEVER.

BY W. ST. JOHN COLEMAN, L.C.P., L.R.C.S.I.,
MEDICAL OFFICER OF THE MILTOWN MALBAY DISPENSARY DISTRICT, ETC.

CONCEDING at once the desirability of "completing as far as possible our knowledge of the causation of fevers," I freely availed myself of the opportunities afforded me in an epidemic which visited my district during the past year in determining answers to THE LANCET interrogatories of Jan. 28th, 1865. The substance of the following remarks is deduced from the treatment of nearly one hundred and fifty cases, and their accuracy is dependent on careful clinical notes taken at the time.

1. "*On the importation of enteric fever by an infected person, or by fomites attached to clothes &c., into a locality where it has not been previously prevailing; and of its subsequent spread; with any facts relating to the mode of its propagation.*" On the 18th of April four cases of fever were brought under my notice. Three were of the gastric type, in the village; one enteric, some two miles distant in the country. To no source of contagion could any of them be attributed, but original sources of disease in each instance was rife. Ill-kept, faultily-constructed sewerage, or heaped-up decaying vegetable and animal refuse matter in one or both.

2. "*On the tendency to spread, or the reverse, of enteric fever in hospitals.*" The entire of my cases were treated in their own homes. With respect to its liability to spread, I quote from my report to the Poor-law Commissioners: "In every family where more than one member was attacked, the source of the disease was sure to be convenient, or the precautionary measures of cleanliness *and removal of discharges neglected.* In the cases where the poison was imbibed elsewhere than about their own premises, the disease never spread."

3. "*Of the infecting power of the stools of persons suffering from enteric fever—apart from sewage.*" As in every instance I warned the attendants to destroy the stools, time sufficient was not allowed for the development of infection thereby, or, if so, only in such instances as left it impossible to discriminate between the sewage element and itself.

[After the foregoing was written in my note-book, I was brought to see the following case:—C. O. B——, aged forty-nine, has had three children ill of fever; attended them throughout herself, and felt quite well until about a week ago, when, going down the lane from the house to empty "slops" in the river, she was detained by parties passing on the high-way, from whom she screened herself in the ditch. During the period of concealment she experienced a most offensive odour from the vessel, which, to quote from herself, "sickened her heart," and necessitated her lying down. She took to her bed four days afterwards, and, fulfilling a presentiment which from that moment possessed her, died upon the fourteenth day from her exposure to the fetid emanation referred to.]

4. "*On the appearance of a single case of enteric fever in an isolated house, village, or other locality, independently of importation of the poison, stating particularly the degree of isolation, the reasons for excluding the possibility of importation, and the apparent cause of the fever.*" And,

5. "*On the occurrence of a single case of enteric fever in a family without any subsequent spread.*" As many of the illustrations I deem it necessary to adduce are common to both these inquiries, it will, I trust, be permitted me to consider them together.

Mrs. H—— upon the 23rd of April, and Sub-constable M'M—— upon the same day, were prostrated by enteric fever. The former lives at the extreme end of the village from the parties alluded to as having been attacked on the 18th, and no communication could have taken place between them. Her husband and children, who occupied the cottage, and had hourly access to her, escaped. In the instance of the policeman, he was exposed to no contagious influences whatever; but I learned afterwards *that the privy was a favourite smoking place. This man was permitted to share the same sleeping apartment with five others, not one of whom contracted the disease.*

In continuation, I will quote briefly from my case-book.

Miss B——, residing in a district peculiarly exempt from the fever, experienced a most offensive smell from some heaped-up manure whilst out walking. She was obliged to sit down, so overpowering was it, she said; and eight days afterwards, when I saw her, twelve or fourteen lenticular spots showed themselves on the chest and abdomen, with diarrhœa of yellowish matter. Her sister was her constant attendant throughout, and neither she nor the large household, between which and the patient she was a continually passing medium, were at any time then or afterwards infected.

M. C——, a labourer, aged twenty, was treated in the cabin shared by his mother, who attended him, his father, brothers, and sisters, every one of whom enjoyed an immunity from the disease.

B. C——, a labourer, occupying the same apartment with his parents, wife, and children, not one of whom suffered.

I select these, not that they were more remarkable examples, but because they come first of many similar cases; carefully studied clinical cases, that, as far as I myself am concerned, have placed beyond any doubt the non-communicability of typhoid or enteric fever, or its identity with typhus.

I propose to contribute a paper deduced from the study of the cases lately under my care; and although I can claim for it nothing but the care with which the notes upon which it is grounded were recorded, I cannot but hope that the importance of the diseased state, and the earnestness with which I studied it, may earn for my clinical observations the attention of my professional brethren.

Wavelands, 1866.

LITHOTRITY SYRINGE.

BY CHAS. FREDERICK MAUNDER, ESQ., F.R.C.S.,
SENIOR ASSISTANT-SURGEON TO THE LONDON HOSPITAL.

IN THE LANCET published on the 24th of February last I observed a reference to an instrument, invented by Mr. Clover, for the withdrawal of fragments of calculus left in the bladder after the performance of lithotrity. At that time and now a patient was and is under my care with stone, who has the greatest difficulty, amounting almost to an impossibility, in voiding the smallest fragments; and I was slowly removing the foreign body by means of the scooped lithotrite. I procured Mr. Clover's instrument, and found it to be of great service in removing débris; but, at the same time, was of opinion that the same principle of action might more advantageously be adapted to an instrument of a different shape. When using the syringe, I observed that the fragments of stone which passed into the glass receptacle of the instrument were, by the action of the india-rubber bottle, driven to and fro the bladder, instead of being permanently retained in the receptacle; also, as the water employed in the operation passed to and from the bladder, fragments of stone were heard rattling against the sides of the catheter, but were not always deposited in the receptacle. To facilitate the passage of calcareous matter to the glass receptacle placed between the catheter and the bottle, and also to keep the fragments in the receptacle when once there, Ferguson, of Giltspur-street, has altered the instrument in two ways for me: 1st, the catheter is shorter by two inches; and 2nd, the old-fashioned smelling-bottle shape of the glass portion of Mr. Clover's instrument is replaced by a glass receptacle very similar in form to a glass breast-pump. By these means the fragments of stone have a less distance to travel, and the depending portion of the apparatus plays the part of a trap, into which the pieces having gravitated, there is no possibility of escape therefrom. At present I have only used this instrument in a case in which the natural efforts are almost powerless to get rid of the débris; but I believe the principle embodied in Mr. Clover's instrument will prove eminently useful in all cases of lithotrity. Small stones having been crushed, the fragments may be thus removed at one sitting; while, aided by chloroform, the number of sittings hitherto requisite for the destruction of a large calculus, and the length of time at present allowed between

them for the spontaneous expulsion of débris, may be greatly diminished. The patient will be less liable to a laceration of, or lodgment of fragments of stone in, his urethra; and the train of disagreeable symptoms which sometimes follow lithotrity need not be anticipated.

New Broad-street, April, 1866.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

NEW OPERATION FOR THE RADICAL CURE OF NÆVUS.

(Under the care of Mr. NUNN.)

THE troublesome character of subcutaneous nævi situated on the forehead, at the root of the nose, or near the brow, is well recognised; and a radical cure which shall leave no scar is certainly a desideratum. In subcutaneous nævi it is difficult by ligature &c. to make certain that the limits of the tumour are reached; and consequently an incomplete result is too frequently the only reward of a troublesome operation. In the treatment of the superficial cutaneous nævus, which is little more than what is called "port-wine stain," and in the "port-wine stain" itself, pressure is of service. Mr. Nunn told us that Mr. Bigg, the surgical mechanician, had mentioned to him a case in which pressure by means of a light steel spring with a pad completely removed from the face of a young lady a very serious disfigurement of this kind. In the following instance a novel proceeding was adopted:—

C. M——, male child, aged two years and a half, admitted July, 1865, with a circular nævus the size of a shilling situated on the right side of the forehead, over the frontal eminence. The tumour was more subcutaneous than cutaneous; the skin covering it had, however, been acted on by caustics &c. before the patient came under Mr. Nunn's charge, and the original appearance of the surface of the tumour was therefore no longer to be observed. Pressure by means of a cork pad and elastic band, as also the excitement of suppurative inflammation induced by setons, having failed to produce obliteration of the vessels constituting the nævus, Mr. Nunn made three incisions down to the bone (one horizontal and two vertical), so as to form a rectangular flap, which, when lifted up, included the tumour. The flap was so cut as to be reflected downwards. The dilated vessels forming the tumour were then clipped away as closely as possible to the cutis, which was very thin; the flap was replaced in its original position and secured by suture, moderate pressure being sufficient to arrest bleeding.

Union by first intention was not quite complete; but on an inspection of the patient some months after the operation only a very faint line of cicatrix was visible, which will probably be barely perceptible in a few years.

ST. BARTHOLOMEW'S HOSPITAL.

POPLITEAL ANEURISM OF THE RIGHT LEG, IN A MAN WHO HAD PREVIOUSLY UNDERGONE THE OPERATION OF LIGATURE OF THE FEMORAL ARTERY FOR ANEURISM IN THE OPPOSITE LIMB; LIGATURE OF THE RIGHT FEMORAL ARTERY; RECOVERY.

(Under the care of Mr. HOLMES COOTE.)

IN a former case, now convalescent, operated on by Mr. Coote, the aneurismal swelling was in Hunter's canal, and projected towards the inner part of the thigh. In the present case, the tumour was small and globular, and situated between the hamstring tendons. The patient, a spare man, thirty-two years of age, attributed the disease to the fact of his having walked from London to Manchester in search of work. The first operation was done at Liverpool, and with complete success. The second was performed at St. Bartholomew's Hospital, on the 14th of April, by Mr. Coote. An incision having been made down to the inner border of the sartorius, that muscle was pulled gently aside; the sheath of the artery was then opened, and the needle passed round the vessel, care being taken to displace the parts as little as possible. The tying of the ligature was followed by the complete cessation of pulsation in the aneurismal sac, nor has there been any return of pulsation in the least degree.

The patient had not experienced much inconvenience from the presence of the aneurism; and Mr. Coote remarked that the circulation was undisturbed below the swelling, and there was an absence of the usual feeling of numbness in the limb. These circumstances were explained by the fact of the aneurism being small, and of such a nature as not to interfere with the current of blood.

FRACTURES OF THE OS CALCIS.

(Under the care of Mr. COOTE.)

Fractures of the os calcis proceed either from muscular action or from direct violence. Of the former we saw an instance in Stanley ward, under Mr. Coote's care, in the person of a middle-aged woman, who slipped down a stone step on leaving a house. She walked some distance afterwards to her house, and thence to a railway station, before coming to the hospital. The muscles of the calf had pulled the upper fragment away to the extent of two or three inches, and turned it on itself, so that the broken edge looked backwards. She was kept in bed, and the foot pointed downwards by the aid of a padded turned splint. By degrees the upper fragment came nearer to the lower, and good fibrous union was established, when the patient, by her own desire, left the hospital.

An instance of fracture from direct violence is now in Rahere ward, also under the care of Mr. Coote. A Welsh milkman, sixty-four years of age, was knocked down by a cab, the wheel of which passed over his heel. In this case the tendo-Achillis was completely divided, and projected from a lacerated wound of the integument; the os calcis was broken into many fragments. The patient could not bear any mechanical appliance, consequently a charcoal poultice only was applied, the tendon having been replaced. A considerable amount of sloughing ensued, but no unfavourable symptom supervened. The wound is now granulating healthily, and the deep-seated flexor muscles have sufficient power to keep the foot at right angles to the leg.

LONDON HOSPITAL.

PAINFUL IN-GROWING NAILS OF GREAT TOES OF BOTH FEET, CURED BY OPERATION WITHOUT INTERFERENCE WITH THE NAILS.

(Under the care of Mr. CURLING.)

THE following notes were furnished us by Mr. F. S. Colquhoun:—

Henry W——, aged eighteen years, was admitted on Nov. 30th, 1865, suffering from in-growing of the nails of the great toes of both feet. The ends of both toes presented a bulbous enlargement, the outer edge of the nails being buried deeply in the mass. He stated that he had been subject to it for the last twelve months, and attributed it to his cutting the nails short and rounding the corners. They gave him great pain and inconvenience. He had walked lame for six months, and had been obliged to cut his boots so as to enable him to wear them at all; but for the last four months he had been able to wear only slippers.

On Dec. 7th, Mr. Curling excised, under chloroform, the whole of the bulbiform enlargement close up to the outer edge of the nail. This portion, which was about the size of a large nut, was cut so that a sloping surface directed towards the middle line of the toe was left; thus the in-growing nail was completely exposed, and overhanging the raw surface. Mr. Curling explained at the time that when the surface healed, the cicatrix would contract, and so make the nail overhang more, and thus complete the cure. Wet lint was applied to the toes throughout, the wounds healed rapidly, and a fortnight after the operation the lad left the hospital, able to walk,

and to wear boots quite comfortably. Mr. Curling directed him not to cut the nail at the outer side any more, but to cut it off square.

Mr. Curling remarked that this mode of permanently curing a very troublesome affection, without resorting to the coarse operation of evulsion of the nail, appeared to be very little known and practised. Mr. Annandale, in his prize essay on "Malformations and Diseases of the Toes," makes no mention of it. The removal of the nail gives frequently only temporary relief; for when the nail grows again it is very liable to cause the same irritation as before; but the excision of the hypertrophied end of the toe is not only less painful and severe, but is necessarily a radical cure, for nothing remains which the nail can grow into and ulcerate.

WESTMINSTER HOSPITAL.

TWO CASES OF EXTRAVASATION OF URINE, ONE WITH RETENTION.

(Under the care of Mr. BARNARD HOLT.)

THE good effects of freely incising the tissues in cases of extravasation of urine, a mode of treatment universally adopted, were well shown in the two following cases:—

R. C——, aged forty, an unhealthy and extremely emaciated man, was admitted, suffering from retention and extravasation of urine. He states that he has been the subject of stricture for ten years, during which time the stream of urine had become gradually smaller until retention ensued, and the unsuccessful attempts of a surgeon to relieve him by a small catheter had resulted in the urine having escaped into the areolar tissue of the scrotum and perineum. At the time of admission these parts were enormously distended, and no urine had passed per urethram for twenty-four hours. Both the scrotum and perineum had commenced to slough. The patient was very feverish, having a hot skin and a pulse of 130, his tongue being coated with a brown fur. After very considerable difficulty (as false passages had been previously made), a No. 3 catheter was passed into the bladder, and a considerable quantity of highly fetid urine withdrawn. The catheter was tied in the bladder, and two free incisions were made on either side of the scrotum and perineum, which gave exit to some of the infiltrated urine. A mixture of quinine and opium was prescribed, and the diet was beef-tea and brandy. On the following day the patient was more comfortable; the urine escaped freely by the catheter, and there was no further infiltration; the tongue had somewhat cleaned, and the pulse was less frequent. The patient continued steadily to improve; the catheter was removed, and replaced by a larger one; the sloughs separated; and the surface of the testicle, which was exposed, as well as the perineum, presented a healthy granulating surface. As, however, he was evidently in an advanced stage of phthisis, no hopes were entertained of his ultimate recovery; and although, so far as his retention and infiltration were concerned, he was progressing most favourably, he died from phthisis one month after admission.

W. P——, aged thirty, a cabman, was admitted on the 30th of October last, under Mr. Holt's care. The patient stated that between four and five o'clock on the morning of his admission, he fell astride a chamber-vessel, which broke and lacerated his scrotum; and that since this accident, although he had been free from any difficulty in passing his urine, he now was incapable of relieving the bladder, the small quantity of urine that did escape being infiltrated into the areolar tissue of the scrotum, which, at the time of his admission, was greatly distended. Two small wounds were noticed in the perineum, from which there was an exudation of urine mixed with blood. Having failed in the passage of a gum-elastic catheter, a No. 2 silver instrument was introduced into the bladder, and was tied in. Two incisions were also made in the scrotum to give free exit to the infiltrated urine, and a hot fomentation-flannel was applied. The following day a gum-elastic catheter was substituted for the silver one, through which the whole of the urine escaped. No further infiltration had taken place, and the swelling in the scrotum was materially less. But a very small portion of cellular membrane escaped, the wounds speedily healed, and in a fortnight he was enabled to leave the hospital perfectly well.

ST. THOMAS'S HOSPITAL.

STONE IN THE URETHRA; SUCCESSFUL REMOVAL.

(Under the care of Mr. LE GROS CLARK.)

THE long time that the stone was accumulating, its large size, and the impunity with which it occupied the urethra, are the interesting and unusual points in this case. That the pressure of the foreign body was on the eve of producing serious mischief was evident from the inflamed and swollen state of the surrounding parts, which would probably have terminated in abscess and ulceration had not the cause been removed. Considering the difficulty which so often attends the closure of wounds of the urethra anterior to the scrotum, the opening in this instance healed readily and kindly.

C. B——, aged thirty-eight, was admitted into St. Thomas's Hospital on Nov. 23rd, 1865. He stated that he had formerly passed gravel in his urine, and that during the last three years and a half some obstruction had existed to the passage of the urine, which had gradually increased, though not to such an extent as to occasion him any serious inconvenience until about a month before his admission. The history he gave was not very definite or satisfactory as regards details, beyond his statement that when he wanted to micturate he "used to press on the lump in his passage, and then the water would come." He applied for relief in consequence of swelling of the penis and scrotum, with attendant suffering and constitutional disturbance. At the junction of the penis and scrotum there was a large firm swelling, which, together with the other general and local symptoms, suggested the existence of a circumscribed abscess; but on attempting to pass a catheter, the presence of a calculus, blocking the urethra, was ascertained. A futile attempt to remove it with forceps was made; and, the patient being placed in the lithotomy position, an incision was made over the swelling, and a stone dislodged from the sacculated and very indurated portion of the urethra in which it was lodged. It was phosphatic, of large size, and oblong in form, the smaller circumference measuring two inches and the larger three. A large elastic catheter was passed into the bladder, and an elastic tube was attached to its extremity, to allow of the urine draining away without distending the bladder. He was discharged at the end of a month, and the small fistulous opening which was then left healed after one or two applications of nitrate of silver.

Provincial Hospital Reports.

YORK COUNTY HOSPITAL.

CASE OF EMBOLISM OF THE HEART.

(Under the care of Dr. SHANN.)

THE following case, with remarks, has been forwarded to us for publication by Dr. Edward Drummond, house-surgeon:—

John R——, aged thirty-nine, agricultural labourer, admitted Nov. 23rd, 1865. Has led a loose kind of life, and, although not absolutely a drunkard, has been a steady gin-drinker for many years. Has of late been very irregularly employed, living from hand to mouth on the earnings of odd jobs as a stable-help, ill-fed, ill-cared-for, and residing in low neighbourhoods of this city. Health gradually failing. Has had slight winter-cough for some years. A fortnight since his abdomen and legs began to swell, and he sought admission into hospital.

At the time of admission his appearance was characteristic of advanced and fatal disease: face puffy and congested; lips livid; integuments œdematous; feels very weak and exhausted; cough troublesome, with slight mucous expectoration; lungs generally subcrepitant; no increased dulness on percussion in the more dependent parts of the chest on varying the position of the body; respiration feeble; air enters with moderate freedom, so far as the fluid in the vesicles will admit of it; has at times considerable dyspnœa and gasping respiration; heart's sounds feeble, but no bruit; urine scanty, specific gravity 1017, no albumen; bowels costive; appetite fair, but food ill-digested. Ordered nutrients, and a mixture of the tinctures of iron, digitalis, and cantharides, with four ounces of gin daily.

Dr. Shann and Dr. Drummond were of opinion, that although

no indications of embolism were then present, its occurrence might be reasonably expected.

The patient continued in a very precarious state for a fortnight, his heart being from time to time examined; no bruit audible.

Dec. 12th.—Has been much worse for four days; œdema increasing; takes almost no food; urine very scanty; bowels relaxed; lungs subcrepitant. On auscultating the heart a well-marked soft bruit was heard with the first sound, which was attributed to the formation of a coagulum attached to the mitral valve. He slowly sank, and died at two P.M. on Dec. 15th, not suddenly, but overcome by exhaustion and dyspnœa.

Autopsy, thirty hours after death.—Integuments intensely œdematous. Abdomen and chest both contained a large quantity of serum, the gravitation of which was in the chest prevented by numerous adhesions. Liver in a state of advanced cirrhosis. Kidneys and other abdominal organs free from disease. Veins turgid with black fluid blood. Lungs congested throughout; the upper half of the left lung the seat of pneumonia, which had run on to the suppurative stage; no tubercles present. The pericardium contained a considerable quantity of serum. Heart subdilated; its cavities engorged with black fluid blood. In the left ventricle was found a thin fibrinous concretion, three inches in length, attached by two spur-like processes to the mitral valve and the uneven muscular surface of the auricle; being about a line and a half in breadth at its thicker and attached, and terminating in fine filaments at its free, extremity, which passed through the semilunar valves into the aorta. To one portion of the tricuspid valve was attached, by two broad root-like spurs, a concretion thicker than the preceding, about four lines in breadth, and having a rounded extremity floating free in the right ventricle. This concretion contained minute blood-clots between its layers. A smaller coagulum was attached throughout its whole length in a sessile manner to another portion of the same valve. All these clots were of a reddish-fawn colour, and were made up of layers of finely coagulated fibrin. No other clots were found in the branches of the pulmonary artery or other vessels. The head was not examined.

This case appears valuable as that of a man prematurely old from exposure to conditions eminently calculated to engender debilitating disease; the victim of cirrhosis and its attendant dropsy, conjoined with extreme feebleness and exhaustion; with a weak and subdilated heart circulating impoverished blood through capillaries the tonicity of which was greatly impaired, and from which transudation of serum was readily permitted; the blood being rendered still more depraved, and its fibrin liable to coagulate, by checked excretion—circumstances suggesting a strong predisposition to embolism, which was anticipated before any positive sign of its existence had become apparent. The heart is examined day by day without such sign being elicited. Three days prior to death (the heart not having been examined for four days antecedent) a bruit is heard, and set down to embolism of the mitral valve. A post-mortem examination discloses the evidence of embolism in that situation and in the corresponding valve of the pulmonic heart—thus confirming the diagnosis.

It is probable that embolism was the attendant accident rather than the cause of death in this case; and there is good reason for supposing that this is not unfrequently the case. Death appearing to the physician sufficiently accounted for by other causes, he makes no post-mortem examination, and the embolism escapes detection. In the dead-house we often see minute filamentous clots of fibrin in the heart, interwoven among the cordæ tendineæ and muscular bundles, the presence of which during life in those situations scarcely, if at all, accelerated death.

The above case is interesting and instructive in many respects; and it is laid before the profession in the hope of its contributing in a slight degree to clear up a subject once very obscure, but the pathology of which is now rapidly becoming more definite.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.—The annual meeting of this association was held on the 17th inst., when the Bishop of Manchester took the chair. From the report read by the secretary (Dr. Morgan) it appears fever from overcrowding and impure air is greatly on the increase. 3788 cases are reported in public practice, mostly typhus; the deaths being one in eleven, or in true typhus one in six. Mr. W. Fairbairn, Rev. Canon Richson, Rev. J. D. Kelly, Dr. Noble, and other gentlemen spoke in praise of the Corporation of Manchester and the efforts of the association for their practical measures to improve the condition of the poorer classes.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4TH, 1866.

DR. BARNES, PRESIDENT.

THE following gentlemen were elected Fellows:—Drs. J. Carless, Astley Cooper, Horniblow, Sheraton, T. J. Walker, A. Wiltshire, John Wilkins; Messrs. A. J. Lowe, R. Roberts.

Dr. GERVIS exhibited a specimen of a Fœtus possessing many points of interest in its physiological development.

Dr. MEADOWS exhibited a specimen of Cystic Development of the Fallopian Tubes consequent on obstruction at the ostium uterinum. The left tube contained two cysts; the right, one. They were each about the size of a small walnut, and filled with a thick brownish fluid. The patient had died of pelvic peritonitis, the result of menstrual suppression from cold.

Dr. MEADOWS also showed a new Intra-uterine Stem. It consisted simply of a solid glass rod, the size of No. 6 catheter, two inches long, and having a flat disc at the vaginal end. He had been led to adopt this form from the inconvenience sometimes arising from the irritation of the ordinary metal or ebonite stems, glass being not only cleaner and free from corrosion, but for these reasons more easily borne than either of the others.

Mr. MARSHALL, of Dover, related a case of

DISEASE OF THE PLACENTA;

with notes by Dr. GRAILY HEWITT, who considered that the condition of the placenta was not one of fatty degeneration, but likely to be the result of effusion of lymph at a period probably two or three months antecedent to delivery. The yellow layer described had the appearance of syphilitic disease; but there was no history of that disease having affected the patient. The drawing before the Fellows well illustrated the chief features of the specimen.

The PRESIDENT considered the case not so very uncommon. The physiological explanation consisted in the fact of there being an excess of fibrin in the blood of pregnant women. He believed the case to be neither one of fatty nor of fibrous degeneration, but one in which fibrin had been thrown out. The yellow layer and whole appearance of the placenta did not, in his opinion, necessarily indicate the existence of syphilis in the system.

Dr. GREENHALGH gave the history of a case of

OBSTRUCTIVE DYSMENORRHŒA.

He considered dysmenorrhœa to be either congenital or induced; and the stricture to be of two kinds, absolute or relative. After referring to the various modes of treatment, the author stated that, in the case under consideration, he had had extreme difficulty in passing a sound. He was obliged to draw the uterus down by Sims's needle, and then made use of his (Dr. Greenhalgh's) metrotome. In the course of four days after the operation the patient complained of an ill-defined pain all over her. She gradually got worse, vomiting came on, and she died on the ninth day after the operation. At the post-mortem, peritonitis of a low form, with considerable tubercular deposit, was found; the uterus was bound down by old adhesions, and the incision had not gone right through the os internum. Her death was considered to be due to her want of care after the operation. The author concluded by referring to all the cases he had operated on, which had usually done well, and stated his strong objection to the introduction of sponge-tents after operating.

Dr. BARNES considered that the danger rested in cutting the os internum. He thought very little danger was to be feared from incision of the os externum. The cervix uteri might be treated by dilatation. He agreed with Dr. Greenhalgh that absolute rest was necessary after operation, and believed that the case would be a lesson to all, and make them adopt every precaution, or even hesitate to incise the internal os.

Dr. ROUTH expressed his thanks to Dr. Greenhalgh for bringing the case before the Society. He thought the operation was one of danger, and required the greatest possible care both before and after. The case was a very unfortunate one, from the length of time occupied in operating, as also from there being no loss of blood; he always liked to see three or four ounces lost. He did not think there was any danger from cutting the internal os when the fundus uteri was free

from inflammation. Fatal cases were known after passing the ordinary sound.

Dr. ROGERS agreed with all that Dr. Routh had said. He considered the internal os to be frequently the seat of stricture. He added his testimony to the danger that sometimes attended incision of the cervix, and stated that he had also lost a case after operation.

Dr. RASCH said that he had never met with a case where there was stricture of the internal os, nor had he ever failed to pass a sound. Cases said to be strictured he had found flexed, which on being reduced admitted the sound.

Dr. MEADOWS remarked upon the necessity of ascertaining, as far as possible, the condition not only of the uterus, but of its appendages also, in all cases where operative measures were contemplated. He believed that in those cases where a fatal result had followed even so simple a proceeding as the passage of the uterine sound, some organic lesion would be found to have been the cause of the mischief, the uterus being exceedingly sensitive of any interference under these circumstances. Unfortunately the diagnosis of some of these conditions was often very difficult, and the real state of the case was only discoverable on a post-mortem examination. In Dr. Greenhalgh's case there was reason to suppose that some displacement of the uterus existed, and the history was one indicative of previous metro-peritonitis. This being so, and the fundus uteri having become adherent in its malposition, he would regard such a case as positively contra-indicating any operative interference. He believed that in all cases of flexion of the uterus, especially when of long standing, or of version when replacement was a matter of difficulty, the use of the knife was very likely to lead to evil and even fatal results.

Dr. Gervis, Dr. Head, Dr. Balls, Dr. Eastlake, and Mr. Baker Brown, jun., also took part in the discussion.

Dr. Greenhalgh having replied to the various speakers, the meeting adjourned.

Reviews and Notices of Books.

The Journal of Mental Science. Published by Authority of the Medico-Psychological Association. Edited by C. L. ROBERTSON, M.D. Cantab., and HENRY MAUDSLEY, M.D. Lond. January and April.

The Fifteenth Annual Report of the Committee of Visitors of the County Lunatic Asylum at Colney Hatch. 1866.

Report of the Resident Medical Superintendent of the Richmond District Lunatic Asylum for the year 1865.

Eighth Annual Report of the Medical Superintendent of the Provincial Hospital for the Insane, Halifax, Nova Scotia. 1866.

The Tenth Annual Report of the United Lunatic Asylum for the County and Borough of Nottingham. 1866.

THE treatment of insanity is by the nature of the disease so distinct a specialty that even those who object most to the multiplication of specialties in medicine are compelled to make an exception in its favour. At one time the care of the insane was almost entirely in the hands of keepers of asylums who were not medical men. The exposure of the great abuses perpetrated, the weight of the influence of the Commissioners in Lunacy, and the modern scientific views of the nature of insanity, have combined to throw the care of the insane almost entirely into the hands of medical men. Scientific investigation of mental diseases, and great and beneficial reforms in their treatment, have been the happy results of the revolution. But as the treatment of insanity thus came to the profession from without—was, as it were, imposed upon it, not solicited by it, those engaged in this department of practice have stood very much apart, and their work has scarcely been sufficiently known. The extreme separation has not been without injury both to the profession and to the specialty: the former, though not unscathed by the scandals which have from time to time occurred and excited popular prejudice against the mad-doctors, has suffered more, perhaps, by the entire neglect of the scientific study of the functions, healthy and morbid, of the noblest organ in man; the latter, already weighted with an inherited odium, has been further damaged in public estimation, and has had its scientific development hindered, by its too great isolation. Though it is most necessary that there should be men engaged in special researches in a limited department, where the field of labour is vast, and though it is unavoidable that specialties of art or practice must follow in the social division of labour, yet it is most certain that with specialization there must, in the social as in the physiological organism, be at the same time due co-ordination or integration of parts; for no branch of science or practice can flourish when completely cut off from the rest. Isolation in such case means speedy degeneration and final death.

There are many signs that the too-marked line of separation between the medico-psychological specialty and the rest of the profession is disappearing. The London University, foiled in its laudable desire to make compulsory regulations for ensuring a clinical knowledge of insanity solely by reason of the want of opportunities of clinical study, has still, in its last Calendar, specially directed the attention of candidates to the importance which it attaches to the subject, and now accepts three months' attendance in an asylum in place of three months' hospital practice. Two of the medical schools have also instituted lectures on mental diseases. On the other hand, those who are specially engaged in the study and treatment of mental disease are exhibiting considerable scientific activity, and are bringing forth results which, on one side, are important contributions to the physiology and pathology of the higher nervous centres, and, on the other side, are dangerously undermining metaphysical philosophy.

In the *Journal of Mental Science* for January there is a valuable paper by Dr. Bastian, in which he gives the results of many examinations into the specific gravity of different parts of the brain, and compares them with the results obtained by other observers. He has found that the grey matter of the convolutions has not a uniform density throughout; that its average specific gravity is less on the upper frontal than it is on the ascending parietal convolutions, and less here than on the upper occipital convolutions; that the amount of difference between the convolutions of the same side is more constant than the amount of variation found to exist between the specific gravities of corresponding convolutions on the two sides of the brain; that the convolutions of the left side of the brain appear frequently to have a higher specific gravity than those of the right; and that the variations observed seem chiefly to depend, not on difference in the quantity of blood in the part, but upon intrinsic differences in the intimate structure of the grey matter. In the same number of the journal Dr. Maudsley criticizes from a physiological stand-point Mr. Neill's work on Sir W. Hamilton's Philosophy, defends Comte against the criticisms of Mr. Neill, and points out how idle any system of philosophy must be which entirely ignores all morbid mental phenomena—the very experiments provided for us by nature. In the April number of the journal is a most careful and complete paper by Dr. Thurnam on the Weight of the Brain and on the circumstances affecting it; the paper containing many elaborate tables. The author establishes the ratio of the brain-weight of the sane in the two sexes, the rate of increase and decrease of the weight of the brain with age, and its relation to the weight of the body and the stature; he investigates the influence of race, of social position and education, and finally the effects of insanity, idiocy, and other morbid conditions, on the weight of the brain. There is an interesting table recording the smallest brain-weights observed among microcephalous idiots; another table records the weights of megalocephalous brains among the insane; and a third table, giving the brain-weights of several distinguished men, shows that while the average brain-weight of ordinary Europeans is 49 oz., that of ten distinguished men was 54·7 oz. Another paper in the same journal, on Sisterhoods in Asylums, sets forth forcibly the difficulties which the unsatisfactory character of the present class of attendants interposes in the way of the successful treatment of insanity, and advocates eloquently the employ-

ment of religious orders of women in asylums. Those who have anything to do with the management of an establishment for the insane know full well that their greatest troubles come not from the patients, but from the attendants: neither high wages nor the most careful selection and supervision will always secure the necessary patience, kindness, and firmness—the combination of opposite and almost incompatible qualities required in a good attendant. The suggestions in this paper are therefore well worthy the attentive consideration of all those interested in the welfare of the insane, and, we may add, of all those energetic women who are now seeking for a higher vocation and a wider sphere of labour than woman has hitherto had.

The reports of the county asylums, which we receive in great numbers about this time of the year, though satisfactory as proving how much is now done for the insane pauper, do not give much scientific information, but rather indicate what a vast quantity of valuable material for scientific study now lies unused in our numerous public asylums. So far as these reports are addressed to the visitors of the asylums it may, perhaps, be deemed more proper to enter into matters of domestic economy than to discuss medical questions; but there can be no good reason why the numerous statistical tables contained in all of them, and professing to record the admissions, discharges, recoveries, and deaths, the form, cause, and duration of the disease, and like interesting information, should not be so framed as to be of some scientific use. They are certainly, as now framed, idle labour; there is not uniformity between the elaborate tables of different reports, and the tables of the same report fail to give any continuous history of the experience of the asylum, which alone would be of real value; they mostly give only the semblance of information. And yet at the last meeting of the Medico-Psychological Association a committee presented a system of tables as a proposed uniform plan of asylum statistics, which was unanimously adopted by the meeting, and published in the *Journal of Mental Science*. Cannot the Commissioners in Lunacy do something towards enforcing such a uniform system of statistics, the neglect of which is so lamentable at present, and the adoption of which would be of great scientific value? We might then, instead of having vague discussions as to whether insanity is increasing or not, obtain some positive facts on which to found a reliable conclusion. Perhaps the Commissioners are not entirely free from responsibility for the present state of things. From the tenour of their reports on the different asylums it would seem to be an inevitable tendency of these to make the medical officer sink science in economics—to make him lose his character as physician, or healer of disease, in his function as house-steward or keeper of lunatics. This is not a desirable transformation, and if it should be accepted as the right aim to have in view, the mischievous separation between the medico-psychological specialty and the rest of the profession cannot but become still wider. It were better, perhaps, that the insane were not under medical care than that medical care should lose its scientific character. It were better still that those who are engaged in this branch of practice, and who have done so much for the humane treatment of the insane, should, while still maintaining the efficient organization of the asylums which they superintend, give their earnest energy to the scientific cultivation of the wide, but waste, field lying around them. No department of medical science promises to repay culture better.

A Companion to the British Pharmacopœia. By PETER SQUIRE, F.L.S. Third Edition, pp. 263. London: John Churchill and Sons. 1866.

IN the preparation of the third edition of this useful work Mr. Squire has earned a further title to the high praise which we bestowed on former editions. The "Companion" has become as necessary to the student of the British Pharmacopœia as the well-known manual of Mr. Phillips was to one who desired to be initiated into the mysteries of the old Pharmacopœia of the College of Physicians. Little more than a year has elapsed since the issue of the second edition of the "Companion," but the author has made a better use of his time than those who should have given us ere this a corrected edition of his text. Amongst various items of information, we observe that the exact proportion of strong acid in the dilute mineral acid is here stated, and notice is taken of the preparations of the new Prussian Pharmacopœia. Some additional non-officinal substances are briefly referred to, amongst which we discover Plasma (a proposed substitute for lard in ointments), Iodoform, Tinct. Lactucarii, Extract of Cod-liver Oil, Pancreatine, Syrups of Morphia and Codeia, Hypophosphite and Hyposulphite of Soda, Triticum repens, &c. In preparing Antimonial Wine, Mr. Squire says that it is sometimes difficult to dissolve the tarter emetic in the sherry, and therefore better to dissolve it first in ten times its weight of hot water. In making Liquid Extract of Ergot, twice as much ether should be used. The London Pharmacopœia formula for the Compound Iron Mixture is better than that of the British Pharmacopœia. In making Liquor Ferri Perchlor., one-fifth more hydrochloric acid should be used. The dispenser is warned against adding sulphuric acid to Tinct. Quiniæ Co., as forty-nine fiftieths of the quinine will dissolve without it, and the sulphuric acid will not prevent the precipitation of tannate of quinia. These hints are valuable, particularly because in each case we believe Mr. Squire to be in the right. We might take exception to some minor statements of less practical importance; as, for example, that assafœtida is useful in the treatment of the cattle plague, that carbolic acid is identical with creasote, and that one grain of opium is the therapeutic equivalent of the twelfth of a grain of morphia.

In this notice we have referred only to the alterations and additions made in the third edition. In conclusion, we can only repeat that we have formed the highest opinion of the value and general accuracy of this "Companion to the Pharmacopœia."

INFANT MORTALITY.

To the Editor of THE LANCET.

SIR,—In your review of Dr. Farr's Statistics of Infant Mortality, you very properly suggest that the cause of the high mortality in England is probably due to diathesis or constitution. Allow me to suggest an important cause which has not received the attention its importance deserves: I allude to the extremely small allowance made to the widows of artisans and working men by the guardians of the poor in many of the metropolitan unions, which, indeed, is only an example of the same treatment elsewhere in large towns. Not less than half of the 64,000 out-door poor of London consists of children under fourteen years of age; and their weekly allowance certainly does not amount to more than 1*s.* per head per week, and, in many instances, to much less, as in Bethnal-green, where some hundreds of children are maintained at a weekly cost of less than 6*d.* per head. The consequence is that if the children survive they come rapidly to a feeble maturity, and, breeding with even increased fecundity, their offspring possess a low vitality sufficient to account for the mortality observed. This cause of deterioration has now been going on for several generations in some localities, and has been aggravated by the introduction of machinery which has replaced labour in Bethnal-green and in many large towns. Other causes are, doubtless, in operation; but this is one which is remediable, and requires to be pressed upon the public attention, because the guardians believe that they are acting with economy, whilst they are, in fact, decreasing the vital power upon which the prosperity of the working classes specially depends.

I am, Sir, yours &c.,

King's-road, Bedford-row, April, 1866. J. H. STALLARD, M.B.

AT the weekly meeting of the Representative Council of St. Marylebone a report from the Sanitary Committee, based upon recommendations from Dr. Whitmore relative to the apprehended outbreak of cholera in London, was presented, and underwent partial discussion.

THE LANCET.

LONDON: SATURDAY, APRIL 28, 1866.

A LITTLE book has lately been published by LONGMANS, GREEN, and Co., of which we shall try to give our readers in the first place an analysis, and in the second an opinion; though it is so small, and the subject of which it treats is so frightfully important, that nothing which we can say about it will exonerate them from the duty of making themselves personally acquainted with it. We speak of "Notes on Cholera, its Nature and its Treatment," by Dr. GEORGE JOHNSON, We shall not "cast the fashion of uncertain evils;" but there is too much reason to fear that England will not for any much longer time escape a visitation of this terrible disease. Dr. JOHNSON has devoted a great amount of thought and time to the consideration of it, and the best means of treating it. His investigation is described by himself—and we can well believe the description true—as "laborious." On this account his reasoning and its results are entitled to our attention. And there is another reason more urgent than all the above, that Dr. JOHNSON'S "laborious" investigation has led him to a strong conviction that the accepted theories of this disease and the common modes of treatment are radically unsound and practically injurious. Now is not the first time, it is true, in which Dr. JOHNSON has brought his opinions on this subject before the profession. He did so in 1854. He did not then convert the profession to his doctrines; but he still adheres to them, and having thought them out more carefully, and gained the assent to them "of the most distinguished physiologists, pathologists, and chemists," he is well entitled to another hearing. We need not say that the book is well written; and although there is apparent now and again a too great readiness to accept whatever makes for favourite opinions, and to treat lightly an opponent, yet, admitting these faults, Dr. JOHNSON writes like a serious and a scientific man on an urgent subject, and as such we shall try to treat him.

At present we shall content ourselves with giving an account of his views. On another occasion we shall attempt to criticise them. We have already said that Dr. JOHNSON entirely disbelieves and rejects the common theory of the phenomena of cholera—viz., that they depend on a loss of the serum of the blood. Not only does he believe that the loss of serum will not explain the symptoms, but that it rather tends to the relief of them by eliminating from the blood the poison on which they depend; and that, so far from the severity of cholera being in the ratio of the amount of evacuation, the reverse is rather true, the worst cases being those in which there is little or no evacuation.

In Section I., discussing the relation between choleraic collapse and the loss of fluid by vomiting and purging, he quotes various authors to show that there is no direct relation between the loss of liquid and the degree of collapse; "but that these conditions often bear an inverse ratio to each other." As a specimen of the evidence which he adduces, we may take the following sentence from Dr. PAREES:—

"It may be confidently asserted that there is no one who has seen much of cholera who does not know that, exclusive of the mildest forms of the disease, a case with little vomiting and purging is more malignant and more rapidly fatal than one in which these are prominent symptoms."

As the loss of serum is not, in Dr. JOHNSON'S opinion, the explanation of the symptoms, so neither is it the explanation of the most important pathological appearances. He says, at p. 58:

"The state of the blood in cholera [black and thick] bears no relation to the loss of water: it comes on when the loss of water has been very trifling; it passes off rapidly, while loss of water by purging continues unchecked."

It is important that we should represent how strongly Dr. JOHNSON urges that the only bearing of the evacuations on the symptoms is a beneficial one. At p. 26 he challenges

"The advocates of the opposite theory to refer to a single case of recovery from collapse in which the intestinal discharges have not continued in a greater or less degree while the symptoms of collapse were passing off."

He concludes Section I., "On the Relation between the Symptoms of Collapse and the Loss of Liquid by Vomiting and Purging," by saying:

"It must, I think, be conceded, that the evidence of there being an inverse rather than a direct ratio between the degree of collapse and the loss of liquid by vomiting and purging, is fatal to the hypothesis so generally received and acted upon—that choleraic collapse is caused by the drain of liquid from the blood."

Section II. shows the fact, that the collapse of a cholera patient is something very different from the condition of a patient who has suffered from loss of blood or exhausting discharges of other kinds, and particularly in these respects—the rareness of syncope, the retention of a great amount of muscular power, and "the rapidity with which a patient often recovers from the former condition."

Section III. discusses the question—Does the effect of various and opposite modes of treatment on the symptoms of collapse afford any support to the theory that a drain of liquid from the blood is the essential cause of that condition? The general result of this inquiry is, that the most successful treatment of choleraic diarrhœa and of choleraic collapse is the treatment by emetics and purgatives, and in other cases by the administration of large quantities of salt and water.

Section IV. need not detain us. It discusses the analogy between small-pox and cholera.

We now come to Section V., which discloses to us Dr. JOHNSON'S positive views on the symptoms and pathology of cholera. Hitherto we have been mainly finding out what he thinks is not the explanation. Now we have to learn what is, in his opinion, the real and sufficient explanation. We shall not keep our readers in suspense, but at once put them in possession of the essence of Dr. JOHNSON'S doctrine. It is this: that the principal phenomena of cholera are of the nature of asphyxia, and that the essential cause of them is an arrest of blood in the lungs, occasioned by a spasmodic contraction of the muscular walls of the pulmonary arteries, "and this spasmodic contraction of the pulmonary arteries is the direct and proper effect of the cholera poison." After enumerating the most important phenomena of choleraic collapse, he asks, "What is the pathological explanation of this remarkable train of symptoms? The one great central fact is this: that

during the state of collapse, the passage of blood through the lungs from the right to the left side of the heart is, in a greater or less degree, impeded." The main question is as to the explanation of this central fact. As we have said, Dr. JOHNSON explains it by supposing a contraction of the minute branches of the pulmonary artery. A frequent post-mortem appearance in patients who have died in the stage of collapse is accumulation of blood in the trunk of the pulmonary arteries, in the right side of the heart, and in the venæ cavæ. Dr. JOHNSON'S theory is, that this accumulation is a consequence of the spasm of the small branches of the pulmonary artery preventing the passage of the blood into and through the lungs. Other arteries he would have us believe are similarly affected. In this contraction of the arteries he finds the explanation of the weak small pulse, of the shrinking of the integuments and eyeballs, of the arrest of the secretions, and most particularly of "that embarrassment of the pulmonary circulation which is the essential cause of choleraic collapse." Our readers will ask what is the proof of this contraction of the arteries which is made to do so much duty in this doctrine. As regards the small branches of the pulmonary artery, it is argued chiefly from Dr. PARKES'S account of the post-mortem appearances of the lung in the stage of collapse. This is said to be "remarkably anæmic," "the tissue is in most cases of a pale colour, dense in texture, and contains less than the usual amount of blood and air." If blood is accumulated in the right side of the heart and pulmonary artery, and is not found in the tissue (the capillaries) of the lung, where else can the stoppage be than in the minute arteries? This is the argument, and the generally contracted condition of the arteries is argued principally from the fact, that cut arteries do not bleed freely in cholera patients.

We must not close our brief analysis of Dr. JOHNSON'S theory without adverting to his explanation of the well-known fact that hot saline injections have often quickly and strikingly, if temporarily, revived cholera patients in a state of collapse. He maintains that their chief effect depends on their temperature; that, in virtue of this, they relax the contracted minute arteries, and so permit of circulation through the lungs. Sect. VII. discusses the general principles of treatment. As Dr. JOHNSON believes that a morbid poison producing contraction of arteries is at the root of cholera, he not illogically arrives at the conclusion that "the natural method of cure is eliminative;" and he sees in the past treatment of cholera a success corresponding wonderfully with the degree in which it was eliminative. We shall try in another article to form an estimate of the effectiveness of this theory of Dr. JOHNSON'S as a "death-blow to the ordinary theory of choleraic collapse."

IT speaks well for the Manchester Medico-Ethical Association that it is able to appear before the profession with a satisfactory Report of its proceedings and condition for the eighteenth time. Its funds, in spite of expenses incidental to a particular and exceptional undertaking, are, we are told, still in a flourishing state; and its *conversazioni* were never attended more numerously, or apparently with greater interest, than during the past session. In respect of public matters concerning the interest of the profession, however, the Association has had less reason to interpose its action and influence than in some past years. One cause of this has been the state of stagnation on the one hand, and of expectancy on the other, arising from the abortive fruits of the Medical Act. Another source of inactivity, according to the Report, has been the decay of that large system of quackery which, under the name of Homœopathy, had at one time so great a hold upon the public credulity, and occasionally led to serious breaches of professional etiquette amongst ourselves.

Another point to which the Report adverts is the absence of medico-ethical disputes amongst our brethren—a state of matters towards which the Manchester Association may fairly lay claim to have largely contributed by its code of laws and former decisions. To show that the Committee have not been, on the other hand, idle during the past year, we may point to several instances of watchfulness and service. For example, early in the last parliamentary session, a petition relative to the two Bills presented by Sir FITZROY KELLY and Sir J. SHELLEY, in regard to regulations concerning the sale of poisons and the providing a superior class of dispensing chemists, was forwarded to the House of Commons by the Association, through the medium of the city members. The Report remarks: "The profession will require to watch that an inferior class of legally recognised practitioners is not introduced by a side wind. Should the dispensing chemists of this country once be placed on a proper footing, and compelled to have a thorough education, there may be hope that we shall also some day see the due demarcation made and recognised by law between the profession of medicine and surgery and the trade in drugs."

The Committee of last year referred to the laudable conduct of the *Manchester Guardian* in excluding indecent advertisements from its columns. This exclusion, we are informed, is still maintained, and the example has been followed in other quarters. But

"The day seems as yet, unhappily, far distant when public opinion or State interference will prevent the advertisement or sale of any secret medicine whatsoever. It is to be hoped that the profession will continue to brand as unworthy the conduct of those of its members who by testimonial or otherwise aid in the disposal of such things."

At one of the *conversazioni* held during the year the subject introduced for discussion was "Unqualified Medical Assistants" by Dr. SIMPSON. It gave rise, it appears, to an animated discussion, which showed that "professional opinion is as yet far from unanimous on the question whether *unqualified* assistants are advisable or the contrary." For our own part we have no doubt upon the matter whatever. If the duty of the assistant be to substitute professional advice and help in the absence of or in lieu of the principal, such assistant should possess at least one qualification. If it be simply to compound medicines, then such is unnecessary. It is naturally with great satisfaction that the Committee report that—contrary to their expectations—the profession has been almost unanimous in its commendation of its "Recommendatory Tariff of Medical Fees":—

"Complimentary letters, and still more complimentary orders, have flowed in from all parts of the kingdom. Telegrams have more than once been received from London for copies to decide questions in the courts of law. Many instances have come to light where difficulties in the payment of fees have been smoothed over, and several of our new members have assigned the issuing of the Tariff as their reason for joining us. The applications for copies were so numerous that

the hon. secretaries could not possibly attend to a tithe of them, and Mr. CORNISH was requested to undertake the publication; he has now almost disposed of a second edition."

In THE LANCET of July 22nd, 1865, we gave a pretty full analysis of the Manchester Tariff.

We may conclude this passing notice of the Report of a very useful body by stating that the Committee presented an address to Dr. STONE on his retiring from the duties of the secretaryship, accompanying it with a small token of their personal esteem.

Medical Annotations.

"Ne quid nimis."

PRESCRIPTIONS.

IN mediæval times an orthodox prescription written by a disciple of the advanced school of polypharmacy must have awfully bothered the compounders. When fifty ingredients formed a moderate allowance for a mixture, and baths, boluses, and enemata were prescribed on the same magnificent scale, it may be fairly assumed that the doctor's idea was that some one or other of the heterogeneous materials might do good, and that his chief care was to exclude anything which would certainly do harm. It is perfectly in accordance with the method ordinarily pursued in analyzing the characters of Shakspeare's plays, if we attribute the extreme impecuniosity of the *Apothecary* whom *Romeo* knocked up, to his having, at the outset of his career, been called on to compound such a prescription. He, being a conscientious man, ruined himself in the attempt; and afforded a warning by which his successors have profited.

The simplicity of modern prescriptions is only a reflection of the greater exactness with which diseases are diagnosed and proper remedies adapted. That which was formerly mere matter of guess is now a logical conclusion from precise knowledge; and not only has the method of prescribing undergone very considerable changes, but the very form and fashion has been modified. There is one very marked innovation in the writing of prescriptions which has of late years gradually made its way, and is now adopted by many eminent practitioners. The alteration consists in the substitution of English for Latin terms when directing the manner of taking or using the remedy prescribed. Everyone has heard the old joke as to the mistaken reading of "pro re natâ," when the polite compounder sent a maiden lady a liniment for her new-born child; and the equally venerable story of the aperient dose prescribed with the reservation, "Si alv. deject. occur. tene manûs," which was translated, "When the bowels are relieved hold your hands."

There is undoubtedly a certain advantage, where druggists are thoroughly educated—as is now generally the case,—in the directions for compounding medicines being written in Latin. It is the only language universally understood; and when the time arrives that all the pharmacopœias of Europe are assimilated, its general use will ensure correctness wherever prescriptions are prepared. Moreover, it is not always advisable to let patients exactly know what they are taking. The practical experience of the most eminent chemists gives daily evidence of this; for prescribers, almost without exception, continue to order Hyd. chlorid. and Pil. saponis co., instead of using the terms Calomel and Pil. opii, as adopted and advised in the new Pharmacopœia. But those regulations in a prescription which the patient has to observe might with advantage be always written in English, so that there would be some check in case the label should not correspond with the doctor's directions. It would avoid all those uncouth Latin ordinances which may be found in Dr. Pereira's "Selecta e Præscriptis," and the attention required in warping Latin to unaccustomed purposes might be more usefully bestowed. When the College of Physicians acknowledge that their learned body understand English better than Latin, and permit the Harveian oration to be delivered in the vulgar tongue, it is surely time that druggists be relieved from the great responsibility incurred in translation of the crabbed Latin directions appended to prescriptions. But if this method of prescribing come into general use, it is important to guard that the directions for the patient be written on a separate line to those for the druggist. One case which recently fell under our observation will illustrate this. A lady was directed to take a certain powder of which six doses were ordered, the prescription running thus:

"℞ Ferri pyrophosphat. ʒi.
in chart. vi. divide one to be taken twice a day."

As therefore the patient understood that she was to divide one of the powders, she had to appeal to the prescriber for the settling of her doubts. Trivial as such a matter may seem, it is well to bear in mind that every part of a prescription should be carefully read over before being delivered up; for somehow it does usually occur that, if a chance for misunderstanding be afforded, error is sure to arise. Hence the importance of medical men, and especially physicians, writing their prescriptions in some such good round-hand as the authorities of the Foreign Office compel their clerks to adopt. It is perfectly true that early professional education, the practice of scribbling notes of lectures and extracts from books, tends to spoil an originally fine hand. But a little training and care will soon obviate this defect, and doctor, chemist, and patient will in the end derive advantage. As a general rule, it may be laid down that the most illegible hands are those in which the letters incline most to the right. This method of writing is a comparatively recent and useless innovation. The old upright hand of the seventeenth century, such as we find in old receipt-books and diaries, might well serve for a model of clearness, and the more nearly the caligraphy approaches to this original style the more legible it becomes.

CHOLERA.

THE following notice has been sent by direction of Lord Granville to the local authorities at the various outposts of the United Kingdom. It precisely accords with the warnings and predictions which we have given, founded upon the careful tracing of the progress of the epidemic:—

"Privy Council Office, April 23rd, 1866.

"Sir,—I am directed by the Lord President of the Council to request you will call the attention of the authorities at to the communications which, by his Lordship's instructions, were addressed to you from this office in August, 1859, and subsequently in July, 1865, soon after the cholera had broken out in Egypt and in Turkey.

"The progress which the disease has made in Europe since the date of the last-named letter, and the fact that, from information received to-day, cases of Asiatic cholera have occurred at Rotterdam and its vicinity, have again called attention to the importance of not neglecting any means of arresting the progress of the disease, if it should be introduced into the United Kingdom; and I am, therefore, directed to reiterate the precautionary suggestions contained in the above-mentioned letters, and to repeat the expression of a hope that means will be provided for the reception and medical treatment of any poor seamen or other persons who may, on their arrival in this country, be found to be suffering from cholera.

"I am, Sir, your obedient servant,

"The Worshipful the Mayor." "ARTHUR HELPS.

The extensive outbreak of cholera on board the ship *England*, on her way to New York, is believed to be traceable to German emigrants who embarked at Liverpool. The ship was from that port, and the danger of the importation of cholera is certainly brought home to us sufficiently clearly to make manifest the necessity for immediate and vigorous atten-

tion to all the measures which can keep out the disease or limit its extension.

Thanks to the enlightened measures of the Medical Department of the Privy Council, under the influence of Mr. Simon, we may anticipate greater success in warding off this terrible enemy than in former years; and owing to the extension of sanitary improvements we may hope that it will find, f imported, less favourable soil for settlement.

THE VACANT APPOINTMENT OF PHYSICIAN TO THE CHARTERHOUSE.

IN the brief biographical memoir of the late Dr. Babington, published in our last issue, we omitted to mention that amongst other appointments which, through this amiable and accomplished physician's death, becomes vacant is the Consulting Physicianship to the Charterhouse.

The Charterhouse has three medical officers on its staff—a resident medical officer, a visiting or consulting physician, and a consulting surgeon; the chief medical duties of the institution being carried on by the resident medical officer. Only a few weeks ago we announced the resignation of John Miles, M.D., who had been the resident medical officer for a period of twenty-five years, and it is a somewhat curious coincidence that the Charterhouse is almost at the same time deprived of the services of its visiting physician, Dr. Babington having served as one of its medical staff for about the same or for a longer period. The duties of the visiting or consulting physician are to visit the institution once weekly, and to see on such occasion any patients whom the resident medical officer may have under treatment, and in whose cases a second opinion is desirable. After this weekly visit the physician dines at the official mess, together with all other officers of the Charterhouse, should he so desire—at least, this privilege is one appertaining to the appointment. In addition to the weekly visit, the consulting physician is liable to be sent to see (in conjunction with the resident officer) any emergent case on which his opinion may be desired. The emolument of the post is a hundred guineas yearly and a weekly dinner, also other honorary entertainments on special occasions.

Although no announcement has appeared in any of the papers concerning this vacancy, we understand that one candidate—a very young physician—has appeared in the field, and is likely, so far as the Charterhouse authorities are concerned, to "walk over the course," as they say in sporting phrase, unless some more eligible candidate presents himself. As Mr. Nicoll, the newly-appointed resident medical officer, has been some thirty years in the profession, it would seem desirable in the best interests of the institution that the visiting physicianship should be held by some physician of age, experience, and standing, the late Dr. Babington having received the appointment when he was about fifty years of age, and the present consulting surgeon of the Charterhouse being Mr. Skey, the late President of the College of Surgeons.

We trust that this notice will induce some one of our physicians of eminence to send in his name to the Governors of the Charterhouse, in order that this post, the duties of which are almost honorary, and certainly most agreeable, may be adequately filled, and in a manner conducive to the harmonious working of the medical staff of this ancient Charity. A meeting of the Governors will be held in the course of another week, when the announcement of the vacancy will be officially made to their Lordships, and it is therefore advisable that such physicians as may desire the appointment should send in their names forthwith, through the recognised official channel—viz., the registrar of the Charterhouse.

CONTAGIOUS DISEASES BILL.

THE Committee to which this Bill—founded on the recommendations of the Venereal Commission—has been referred by the House of Commons, consists of Lord Clarence Paget, Chairman; Sir G. Grey, Bart.; Lord Hartington; Hon. S. Walpole; Colonel Herbert; Mr. Hunt; Sir Charles Russell, Bart.; General Peel; Sir John Pakington, Bart.; Sir Harry Verney, Bart.; Admiral Erskine; Sir James Fergusson, Bart.; Hon. Arthur Kinnaird; Mr. Ayrton. Some evidence has been taken before the Committee, including that of Mr. Skey, the Chairman of the Venereal Commission, and Mr. H. Spencer Smith, the Secretary; and we have reason to anticipate that very useful legislation will follow during the present session. On Tuesday night, in Committee of the whole House, on the motion of Lord C. Paget, a resolution was passed, affirming the expediency of making provision for the repayment out of money provided by Parliament for the purpose of expenses incurred under any Act of the present session for the better prevention of contagious diseases at naval or military stations. The Committee have just issued a special report, and the Bill will be forthwith recommitted in an efficient form.

DEATHS FROM EMOTION.

ST. GEORGE'S HOSPITAL has been the scene of a painfully sudden death, which recalls a similar incident historical in the annals of the profession. Sir Frederick Roe, having attended a meeting at which the subject of the proposed change in the system of nursing was warmly discussed, he taking an earnest part in the debate, was observed to totter on coming out of the board-room. He was conveyed into a neighbouring room, and received all possible care, but died from apoplexy. The illustrious John Hunter died also (from disease of the heart) in this hospital after a scene of excitement in the board-room. Elderly people, and those suffering from diseases of the heart, should very carefully abstain from mental excitement of any kind; and these are two painful warnings. The sudden death of Mrs. Carlyle, under circumstances of a terribly tragical character, is also attributed to sudden and excessive emotion. She was shocked by her favourite dog falling beneath the wheel of a carriage, and seems to have died from failure of the heart, unobserved, and while being driven in the ring at Hyde-park.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

THE alterations and additions to this well-known hospital, which may truly be called improvements, being completed, we take the opportunity of stating what has been achieved. It would not be far from the truth were we to say that a new hospital has been furnished to the University of Cambridge; and as one of the buildings of that town, which contains such glorious examples of architecture, we are doing but justice to the architect in saying that he has added a building that will always "hold its own," even in such company as that in which it is placed. Nothing is to be recognised exteriorly of the old edifice, which was a good example of the county infirmary of a century ago, where ornamentation certainly was not attempted. The front of the building presents a noble façade, great variety and picturesqueness being obtained by the judicious use of stone, terra-cotta, encaustic tiles, and coloured bricks; the general effect being much heightened by recessed exercising colonnades, and a continuous arcade of coloured brickwork springing from terra-cotta columns with foliated caps and moulded bases. On entering by the centre of the principal front the main corridor is reached, communicating right and left with the wings, and leading to the principal staircases on the male and female sides respectively. The lavatory, with hot and cold water, and watercloset accommodation for the use of in- and out-patients respectively, are contained in projected pavilions at the extreme angles of the wards, which have direct communication with the external air on three of their sides. The ground-floor contains in the left wing a ward

59 ft. 3 in. by 28 ft. and 13 ft. 6 in. high, placed conveniently for cases of accident, containing beds for fifteen males, giving 1500 cubic feet of air to each patient. Adjoining is every requirement in the shape of nurses' and porters' rooms, scullery, hot and cold douche, vapour, Turkish, and Roman baths. The right wing contains the out-patients' waiting-room, physicians' and surgeons' rooms, dispensary, matron's and pupils' rooms, &c. On the one-pair floor, in the centre of the building, is a convalescent or day-room for males, 24 ft. by 17 ft. (exclusive of a large bay-window), which is very prettily decorated, and communicates with an exercising arcade over the colonnade below. This space has also access from a corridor communicating with two physicians' wards, each 79 ft. by 28 ft. 9 in. and 16 ft. high, for males and females respectively, and each containing nineteen beds, giving to every patient 1912 cubic feet of air. The look-out from the day-rooms and exercising arcades is most cheerful, and cannot fail in having an influence on the cure of the patient. On this floor are also separate wards to contain one or two patients, nurses' rooms, and sisters' sleeping-rooms; likewise a board-room, which is reached by a separate staircase from the ground-floor. On the two-pair floor there are two surgeons' wards: one for males and the other for females, each 91 ft. by 28 ft. 9 in. and 16 ft. high, containing twenty-three beds each, giving every patient 1820 cubic feet of air. On this floor is the operating-room, flanked right and left by two wards for four male and four female patients, convalescent room for females, nurses' rooms, &c. Attached to the operating theatre are small rooms for consultation, instruments, &c. In order more equally to diffuse the heat in the larger wards, double fireplaces have been placed in the centre of each, the smoke from them being conveyed in hollow terra-cotta columns with ornamented shafts and foliated caps. These are in themselves handsome features, and, by doing away with the necessity for a solid chimney-breast, permit of a free circulation of air, and allow an uninterrupted view of the entire length of the ward. At the end of each ward is an additional fireplace.

The convalescent or day rooms and the *principal* wards have been decorated with a very happy effect above the skirting, which is dark green, and up to the level of the bottom of the brackets, to which cords are attached to enable the patient to raise himself; the dado is painted a cheerful red, which serves to relieve the blue and white of the bed furniture; at the levels of both the top and bottom of the brackets are run lines of stencilled ornaments in blue, white, and black, while the space between these bands is divided into styles and rails, and panels of two shades of buff. From the top of the brackets to the cornice the walls are painted in a warm green, which gives a sort of subdued sunshining effect in the wards; and the cornice itself has also stencilled ornaments in several bright and well-contrasted colours. The whole effect is that of great comfort and homeliness, entirely doing away with the *workhouselike* look which is so apt on entering ordinary hospital wards to impress the patient with a sense of dreariness and isolation. The whole of the paint is varnished so as to admit of the most ready cleansing and to afford a non-absorbing surface, one, therefore, unlikely to retain any prejudicial miasms generated by disease. This style of decoration should be seen to be thoroughly understood. And lest it should be supposed that the governors have gone to a lavish expense in thus giving a new appearance to hospital wards, we should state that we understand that the expense has not much exceeded what would have been required for the common painting and varnishing the walls. We may quote in justification of such a proceeding a paragraph from a very valuable pamphlet just published*:—

"A bare whitewashed wall has a look and tone of desolation which it would perhaps sound pedantic and somewhat effeminate minutely to analyse, but the importance of which every person who has not lived in a prison or a pigstye all his days will appreciate. In the combination of colours and the traces of design the eye not only finds a silent pleasure, but the mind an unconscious occupation and a salutary relief. It is not well to cherish in the hearts of the poor the ambition of *luxury*, but a life utterly destitute of luxury is cramped and depressed beyond conception. *Taste* is an expensive faculty if it be pampered into absoluteness; but a soul without it misses the richest privilege and keenest relish of existence. The prettily patterned paper supplies at once the type, the conception, and the motive of elegance to the simplest housewife, to rob her of which is, in some sort, cruel as well as mischievous. We really can never hope that our working classes will master the virtues, if they are not trained to the refinements of civilization, and it would be difficult to say how many germs of refinement there may not be in the neat and agreeable aspect of a sitting-room; the habitual contemplation of some artistic picture; the cultivation of a few simple flowers—in short, in the constant presence of something that, however simple, is sweet and beautiful."

* Overcrowding, its Evil and Remedy. Longmans. 1866.

The staircases and passages throughout are warmed by a hot-water system, the coils being so arranged on the upper floors as to assist in warming without being actually placed in the larger wards. Lifts, quick in action for light loads, such as medicines, diets, &c., and slow in action for coals, patients, &c., are provided through the entire length of the building and communicate with each floor. The basement contains kitchen and laundry departments, with all the most modern fittings and improvements. The wards for fever patients are in the extreme rear, with separate entrance, and every precaution for due separation from the main building.

Now as to the *cost*. We are particular on this head, because there appears more ornamentation than is generally allowed in an hospital, and it might be thought that the governors had been needlessly extravagant in this particular; but when the accounts are examined, the most rigid economist might be satisfied. We understand the contract for the execution of the building was taken at £10,975; there have, however, during the progress of the work, been several important additions, which will probably bring the total cost, including an allowance of £1500 for old materials, to about £14,000. No such hospital entirely new could, however, be built for such a sum; as the retention of many of the old walls and foundations, the drains, water-supply, &c., of the original hospital, has no doubt spared the outlay of several thousand pounds.

On the whole, the new Addenbrooke's Hospital must be seen to be appreciated. It is a great ornament to the town, and in every way creditable to the architect, Mr. Digby Wyatt (who has, we may state, just received from the Institute of British Architects the Royal gold medal of the year—the blue riband of his profession), and to the building committee and the medical officers, who have called into existence and worked out the excellent sanitary and other details and judicious arrangements, which make it, for its size, a model hospital.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

IN the seal the sense of smell appears to be but feebly developed. The olfactory nerves have a certain resemblance to those of man, in their form, mode of origin, and position in grooves in the frontal lobes. The alary cartilages are exceedingly large and much plicated, and recall to mind the nasal sacs of the *Cetacea;* and it may be that these cartilages are rather to be considered as the homologues of those sacs than are the turbinal bones, as Von Baer supposed. The muscles of the nose are largely developed. The eye is large and full of intelligence, but the animal appears to be short-sighted when on land, this sense being less important to it there than in the water, where it pursues its prey. The cornea is flat, the lens large and globular. The sclerotic differs from that of the *Cetacea*, and more resembles that of ordinary mammals; but the muscles of the eye and eyelids are formed quite on the cetacean type, except that there is a third eyelid moved by muscular fibres connected with the depressor labii inferioris. As is generally the case when a nictitating membrane is present, there is a Haversian gland. There is also a true, but small, lachrymal gland, but no puncta lachrymalis. The auditory organ is destitute of any concha, but there is a small prominence (in front of its aperture) which represents the tragus. The meatus is long and rather winding, and embraced by incomplete cartilaginous rings. There is also a true bony meatus auditorius externus. The small bones of the ear are normal, except that they are unusually massive. As in the *Cetacea*, there is a large cochlea, but then the semicircular canals are also large. It is doubtful whether the testicles are ever truly abdominal; more probably they are always, as they certainly are sometimes, placed in the inguinal region just outside the abdominal ring. There is a prostate, but no vesiculæ seminales or Cowper's glands. The penis is large, and

suspended to the wall of the abdomen. A large bone, grooved beneath for the urethra, is developed in the septum between the corpora cavernosa. In the female there is a remarkable peculiarity—namely, a veritable cloaca. The perfectly single external aperture leads into a chamber, into the posterior wall of which, close to the entrance, the rectum opens. On the front wall are the clitoris and the orifice of the urethra. The ovaries are placed in peculiar pouches of peritoneum, into which the extremities of the Fallopian tubes open—a condition which also obtains in the *Carnivora*, and is one which effectually guards against extra-uterine gestation. The fœtal membranes also resemble those of the *Carnivora*, the placenta being deciduate and zonary. There are, at least in some, two pairs of mammæ.

The *Pinnipedia* are composed of the following groups:—

Phocidæ.	Stemmatopini.	Incisors,	$\frac{2-2}{1-1}$
	Pelagini. ...	Incisors,	$\frac{2-2}{2-2}$
	Callocephalini.	Incisors,	$\frac{3-3}{2-2}$
Otaridæ.	... ...	Incisors,	$\frac{3-3}{2-2}$
Otaria.	Archtocephali. Platyrhynchi.		
Trichechidæ...		Incisors,	$\frac{1-1}{0-0}$

Trichechus or Odobenus.

The common characters of the *Phocidæ* are—1, hind limbs turned back, and motion on land saltatory; 2, no concha; 3, frontals with supraorbital processes; 4, palate never reaching to the pterygoid processes; 5, tympanic rounded and bullate; 6, three middle toes shorter than the first and fifth; 7, astragalus with a backwardly directed process; 8, no ali-sphenoid canal. As expressed in the above table, the subordinate groups of the *Phocidæ* differ as to the number of their incisor teeth. The elephant seals (*Stemmatopini*) attain an enormous size—i. e., a length of some twenty-five feet,—and the males have the power of dilating the region of the nose in a remarkable manner; hence their name. The common characters of the *Otaridæ* are—1, hind limbs capable of applying the soles to the ground, motion on land a sort of walk; 2, a small concha; 3, frontals with supraorbital processes; 4, palate sometimes extending back as far as the pterygoid processes; 5, tympanic rugged; 6, toes subequal in length; 7, astragalus without a backwardly directed process; 8, an ali-sphenoid canal; 9, a ridge inside the skull corresponds to the Sylvian fissure; 10, only three long nails on hind feet, but the toes provided with long cutaneous flaps; 11, spine of scapula very near its posterior border. A very interesting specimen belonging to this group is now living in the Zoological Gardens. The otaries are very imperfectly known as yet, and they are sometimes divided into *Archtocephali*, with a short bony palate, and *Platyrhynchi*, with a long one; but it is probable that intermediate forms unite these two groups. Those, the males of which are furnished with manes, are termed sea-lions; those without this appendage, sea-bears. The skull of the sea-lion observed by Steller differs remarkably from all the other forms. The otaries inhabit the Pacific area, being found in extreme northern and southern latitudes and on the coasts of Chili and California.

The *Trichechidæ* are in some points like the otaries, in others like the seals. The group is composed of but one genus, *Trichechus*—the walrus. Its characters are—1, skull narrowing more gradually forwards than in the other groups; 2, muzzle truncated; 3, minute supraorbital processes; 4, palate extending back to the pterygoid processes; 5, tympanic even more rugged than in the otaries; 6, toes subequal in length; 7, astragalus normal; 8, two immense canine tusks in the upper jaw; 9, the fifth metacarpal does not articulate with the cuneiform; 10, an ali-sphenoid canal; 11, angle of mandible almost obsolete (as in *Otaridæ*); 12, fifth digit of the foot the largest. The limbs are much as in the otaries, but the spine of the scapula is not so near its posterior border.

AT Guildhall, on Monday, the Governors of Bridewell and Bethlehem Hospital obtained the sum of £61,050 from the Great Eastern Railway Company as compensation for property on the east side of Liverpool-street, &c., intended to be cleared by the railway company.

Correspondence.

"Audi alteram partem."

MEDICAL EVIDENCE.

(LETTER FROM DR. TUKE.)

To the Editor of THE LANCET.

SIR,—I am sorry to trespass again upon your space. I had resolved not to proceed further in a discussion that promised to become a profitless controversy, but Dr. Winslow's letter of last week contains statements that it is impossible for me to leave unanswered.

My former letter contained the following paragraph:—"The unconscious partisanship of medical witnesses engaged under the present system has been often curiously manifested. In the case of Mr. Windham, one of the medical witnesses in support of the case of lunacy was silent—no doubt without dishonest motives—about a letter written in his presence by the alleged lunatic, which was decidedly material evidence in favour of the opposite theory. Again, at the trial of Townley, in which the question of sudden impulse to murder, and of the knowledge by the prisoner of the difference between right and wrong, was most important to the truth, the leading medical witness for the defence suppressed all mention before the jury of an interesting and extraordinary document, placed in his hands by the prisoner, detailing minutely every word of his two hours' conversation with his victim immediately before he cruelly murdered her. I do not impute venality in this; but I do repeat that the present system of 'engaging' medical witnesses is a bad one, and that experts should be appointed by the Crown."

Dr. Winslow, who believes himself to be the medical witness here indirectly referred to, has commented upon these observations, and denied their truth in language so reckless and indefensible, that I can only express my surprise at its appearance in your columns. Dr. Winslow says, "I declare this statement of Dr. Tuke's to be a scandalous and untruthful imputation." Now, it is obvious that a statement is one thing, and the imputation it conveys is another. I assert that my "untruthful statement" is strictly true, my "scandalous imputation" quite consistent with Dr. Winslow's avowed practice.

I will accept Dr. Winslow's mode of expression, and admit that I imputed to him the suppression of all mention of a letter written by Mr. Windham, and of a document drawn up by Townley, "in order to serve the interests of the party who had professionally consulted him." Dr. Winslow does not deny that he suppressed all voluntary mention of Mr. Windham's letter. As regards Townley he writes as follows: "Admitting for a moment that Townley had placed confidentially in my possession a statement of the kind, it was not my duty, as a witness for the defence, voluntarily to refer to it." Surely it is absurd for Dr. Winslow to object to the "imputation" of suppressing a "document" in Townley's case, when he himself states that it was the proper course for him to adopt. He admits that he would have suppressed all mention of Townley's document had he possessed it. The "imputation" therefore cannot be "scandalous." It remains to be seen whether the allegation of the existence of this document, and Dr. Winslow's knowledge of it, is "untruthful."

Dr. Winslow denies that the two hours' conversation between Townley and Miss —— ever took place. Then of course a "document" founded on such conversation could not exist. In this assertion Dr. Winslow betrays a singular defect of memory. It was from Dr. Winslow himself, within a few hours after Townley's condemnation, that I had an account of the conversation, and of the document referred to. He described it to Dr. Seymour and myself as "interesting" and "extraordinary," "lucid and consistent," and gave us the same reason for not having mentioned it in his evidence that he has stated in his letter. I have frequently talked of the circumstance to various friends.

A reference to the report of Townley's trial will show that Townley was alone with his victim about two hours and a half before her death; the importance of evidence that could bear upon his language and demeanour during that time of course would be very great. Dr. Winslow must have made inquiries as to the circumstances immediately antecedent to Townley's

crime, and, on his own showing, forgets that there was a long and momentous conversation between Townley and his victim.

My letter was written on the 8th, when my friend Dr. Seymour was alive, and, as far as I knew, in his usual health. His death took place on the 16th inst., and his evidence to corroborate my statement is no longer available. I believe the fact of Townley's conversation, the existence of the document founded upon it, and Dr. Winslow's own statement to Dr. Seymour and myself, have all passed from his mind; and when he recalls or ascertains the facts, he will feel regret for his hasty denial of the truth, and still more lament the intemperate and offensive language he has allowed himself to use.

As far as I am concerned, I here terminate this unhappy dispute. I will only say, in conclusion, that my evidence before the Commission does not warrant Dr. Winslow's assertion at the end of his letter: that it is "the most cruel and unjustifiable attack ever made upon the honour, honesty, and integrity" of our profession. From Dr. Winslow's verdict I appeal to that of my professional brethren, and especially to those among them engaged in the same studies as myself, many of whom are among my dearest friends.

I am, Sir, yours &c.,

Albemarle-street, April 24th, 1866. HARRINGTON TUKE.

MR. H. LEE ON SYPHILIZATION.

To the Editor of THE LANCET.

SIR,—In the lectures on "Syphilitic Inoculation in 1865" by Mr. Henry Lee, lately published in THE LANCET, there are certain statements relating to the patients treated by Professor Boeck, under my observation, in the Lock Hospital, which require a great deal of qualification; and with reference to which, on behalf of the Professor, who is not here to speak for himself, I trust you will permit me to say a few words.

In THE LANCET of April 7th, Mr. Lee says, speaking of the immunity alleged to be obtained by repeated inoculation with syphilitic matter: "It is a fact worthy the serious consideration of the profession, that the immunity itself is a thing not so easily produced. During the four months that Prof. Boeck remained in this country, he has produced, as was supposed, immunity in two patients only. Mr. James Lane was good enough, after the immunity was supposed to be established, to allow me to perform a fresh inoculation upon each patient. A specific pustule was in each case produced; and from one of these Mr. Lane himself again inoculated." This statement is repeated in THE LANCET of April 14th.

The natural inference is that Dr. Boeck was mistaken, and that no real immunity was obtained after all. Most readers would probably also infer that the inoculations in these patients occupied a period of four months. The following are the real facts, a correct appreciation of which is important at the present time, when syphilization is, to a certain extent, *sub judice* by the profession in this country:—Dr. Boeck's first inoculation was made on these patients on Sept. 5th; his last successful inoculation was made in each of them on Dec. 16th: a period, not of four months, but of three months and eleven days. I mention this because, in estimating the practical value of syphilization, the element of time is important. After the 16th of December they were several times inoculated by Dr. Boeck, and the result being negative, he pronounced that immunity had been obtained; and seeing that the secondary affections for which the treatment had been undertaken had disappeared, he considered them as cured. To test the immunity, Mr. Lee requested to be allowed to make a final inoculation with matter of his own selection. The request was at once granted, and he accordingly inoculated them on the 23rd of December. Three days later a small pustule was found in each of them at the site of Mr. Lee's puncture; and these were considered by Mr. Lee to be specific.

To test the character of these pustules, I inoculated from them carefully on the 27th December, making two punctures in each case. In Case 1 no effect was produced. I repeated the experiment on the 30th December, with the same negative result. Now the only test of a successful syphilitic inoculation is that the pustule shall secrete matter capable of reinoculation; since any irritant inserted under the skin may produce a pustule more or less perfect. Here, the result of this test, twice carefully applied, was negative; and therefore there is no evidence to show that Mr. Lee's pustule was, as he alleges, *specific*. I may add that Dr. Boeck objected to the mode of inoculation practised by Mr. Lee, thinking it likely to produce a pustule under any circumstances, and therefore calculated to mislead. After Dr. Boeck left England, I inoculated this patient with matter from a suppurating bubo, and obtained a small pustule, like Mr. Lee's; but from this, in like manner, I was unable to reinoculate. Three subsequent attempts to inoculate this patient failed altogether. Therefore, so far from disproving the immunity, the result of Mr. Lee's inoculation, and of those made by me subsequently, conclusively show that an immunity as complete as can ever be expected was obtained in this case.

In Case 2 the immunity was one degree less perfect, since my inoculations from Mr. Lee's puncture produced two pustules; they were, however, very imperfect ones, and from them I failed to again inoculate. I afterwards inoculated this patient three times with other matter, and obtained small pustules, but could not inoculate a second time from any of them. On a fourth attempt I failed altogether. Short of absolute immunity, then, this was the nearest possible approach to it. In both cases Mr. Lee's pustule healed in about ten days.

These facts were not unknown to Mr. Lee, for I communicated them to him at the time; it is with some surprise, therefore, that I find he has passed them over altogether without notice.

It is right to mention that an approximate, rather than an absolute, immunity was all that was aimed at by Dr. Boeck, or considered necessary by him as a matter of treatment; and this appears to be obtainable, on an average, in about three months. In five cases, however, the treatment of which was commenced by Dr. Boeck and concluded by myself, a complete immunity, equivalent to that in Case 1, was obtained after inoculation for periods of six and a half, nine, ten, eleven, and twelve weeks respectively.

In THE LANCET of April 14th there is another statement on which I find it necessary to remark. Mr. Lee, speaking of the difficulty of inoculating the matter of an indurated sore successfully on a syphilitic patient, says, "Dr. Boeck during his residence in England did not, I believe, succeed in producing such a result in any one instance." Mr. Lee's belief is erroneous. Dr. Boeck succeeded undoubtedly in one case in producing "a lineal series of inoculations from an uncomplicated indurated sore." The patient from whom the matter was taken was under the care of Mr. Walter Coulson, and was one of the two mentioned by Mr. Lee, whom Mr. Coulson afterwards "auto-inoculated" successfully. From this man Dr. Boeck inoculated one of the female patients. The pustules obtained were well developed. They went through a lengthened series, and were transferred to several of the other patients. That Dr. Boeck did not succeed more frequently arose from the fact that the opportunities for obtaining good indurated sores to inoculate from are few. The scanty secretion which such sores afford is not well adapted for conveyance from place to place; well-marked examples of them are rarely met with except in males, and it was, I believe, only on two or at most three occasions that the attendance of a male patient at the female Lock Hospital was procurable for the purpose. I may add that since Dr. Boeck left, Mr. Gascoyen and I have, each of us, succeeded unequivocally in obtaining a lengthened series of pustules with matter from indurated sores.

Mr. Lee says he was informed by Dr. Boeck that he treated nineteen patients affected with constitutional syphilis in the female Lock Hospital by repeated inoculation. Mr. Lee adds: "Some four or five other cases may have been subjected to the same treatment, which, not having been continued from various causes, are not included in the above-mentioned number." The treatment was discontinued, not in four or five or any other conjectural number of cases, but *in one only*. The patient was a married woman, who was compelled to leave the hospital, contrary to her own wish, in consequence of the serious illness of her husband. Surely if it was worth while to allude to such a circumstance at all, it was worth while to have ascertained the facts a little more accurately than this.

Again, Mr. Lee says, "these women submitted to the treatment under the idea that in future they would not be liable either to receive or communicate disease." This is not the case. The treatment was proposed to them solely as a curative measure, which would save them from a mercurial course, and which it was expected would prevent their having further relapses. It was expressly enjoined by me that no such idea as that mentioned by Mr. Lee should be conveyed to any of the patients.

Mr. Lee further says, that "of those who have been thus treated"—viz., by syphilization, "one death was recently

mentioned at the Medical Society to have occurred; and another case in which the treatment was attempted has lately died in the Lock Hospital." This is undoubtedly correct. But I submit that if it had been desired to state the facts fairly to the profession rather than to disparage syphilization, it would not have been superfluous to add that in the case mentioned at the Medical Society by Mr. Dunn, it was fully explained by that gentleman that the death was in no degree attributable to or accelerated by the syphilization; and that the patient who died a fortnight ago in the Lock Hospital, died of an enormous enlargement of the liver from waxy degeneration, for which she had been for some time under treatment by Dr. Sieveking. In this case, so far from the result being in in any way assignable to syphilization, it is a very remarkable circumstance that out of forty-three occasions on which this patient was inoculated, with matter from every variety of source, on two only was anything approaching to a positive result obtained, and the pustules were then very small and of brief duration.

Speaking of syphilization, and of the interest excited by Dr. Boeck's visit to England, Mr. Lee says, "it is due to the profession and to the public that the evidence afforded upon the subject should be fairly given." And again, that "we are bound, as students of facts, to state fairly the results obtained under the circumstances." In these sentiments I cordially concur. Whether they have been acted up to by Mr. Lee I will, after what I have said, leave the readers of THE LANCET to judge.

I disclaim, on the part of all concerned, the slightest intention to suppress or withhold evidence on this subject. It has been my purpose all along, I have publicly expressed it more than once, to lay before the profession in due time a full account of all the cases treated in the Lock Hospital by syphilization. I hope, in conjunction with my colleague, Mr. Gascoyen, to have the privilege of doing this through the medium of the Medico-Chirurgical Society, where the subject can be fully and fairly discussed. I should have been delighted at any time to furnish Mr. Lee, had he applied to me, with full and *authentic* particulars; but I think I have some reason to complain when I find that cases which have been under my responsible charge throughout, which possess considerable public interest and importance, and an account of which I am at this present time preparing for publication, have, without any previous communication with me, been commented upon and prejudged in this offhand and hearsay fashion.

I am anxious to have it understood that I am not writing as a champion of syphilization, on the merits of which I wish to reserve my opinion and to maintain for the present an entirely neutral position. I am very desirous, however, that it should have fair play, and also that no injustice should be done to Dr. Boeck, for whom I entertain a very sincere respect.

I am, Sir, your obedient servant,

JAMES R. LANE, F.R.C.S.

Berkeley-street, Piccadilly, April 16th, 1866.

THE EXPANDING UTERINE STEM.

To the Editor of THE LANCET.

SIR,—As the object of my communication in your valuable journal of March 17th, relative to Dr. Henry G. Wright's "new instrument," first described on the 24th of last February, was solely to put forward my claims as inventor of a stem in March, 1864, introduced by means of a stilette, upon the withdrawal of which it expanded laterally in the body of the uterus, I purposely avoided any discussion upon *the use and abuse* of such an instrument; therefore Dr. Wright is perfectly correct in his inference "that I had good reason for the omission" of all reference to flexions of the uterus. But as Dr. Wright appears to think I ought to have alluded to the mechanical treatment of such flexions, which I was anxious to avoid, as I differ from him most materially, I now very reluctantly feel called upon to make brief allusion to those conditions.

I have frequently, from the 8th of May, 1864, to the 1st of August, 1865, used my bilateral expanding stem in flexions of the uterus, in which slight congestion, due simply to flexure so ably depicted by Boivin, Planche IX., Fig. 6, and where division of the cervix uteri had not been previously effected, solely with the view of curing malpositions. In many of the cases the results were so unsatisfactory that since August I have only ventured in two cases to use the expanding stem for that purpose. I cannot any longer refrain from cautioning your readers against the evils resulting from this practice. In one of these cases death ensued from metro-peritonitis last August, whilst I was in Edinburgh. The young lady was cautioned to have it removed if it occasioned the least discomfort; but she was so anxious to be cured of her malposition that she retained it for ten days in spite of great pain, for which, when it became intolerable, she sent to Dr. Eastlake. That gentleman at once removed the stem, and ordered appropriate treatment. She subsequently placed herself in the hands of a homœopath, under whose care she died.

I am now using the ordinary silver stem in cases of anteflexion of the uterus. I am quite of Dr. Wright's opinion, "that the hysterotome is now-a-days employed very indiscriminately." Still in three of the cases above alluded to, where my expanding stem with a very moderate spring could not be borne, division of the cervix was successful; two of the patients, after being sterile for years, have since become pregnant, and been safely confined of living children. I may further remark that I do not think anyone is justified in introducing a stem into the body of a retroflected uterus, now we possess such safe contrivances as Hodge's pessaries, which, if skilfully used, and in appropriate cases, rarely or never fail; and I can endorse the words of that truthful and trustworthy authority, Dr. Churchill: "I have now used it (Hodge's pessary) in many cases without a single failure." Might I ask Dr. Wright to refer me and your readers to the writings of any authority prior to March, 1864, in confirmation of his statement that in the construction of intra-uterine stems, pessaries, or tents, "there is really nothing new in the use of a spring"? also where in Kiwisch's writings it is stated that he "first employed it for dilatation of the cervix"? I shall likewise feel indebted to Dr. Aveling if he would give me more definite information concerning the spring tent found "in a drawer in the small room adjoining Sir J. Y. Simpson's ward." In Dr. Aveling's words, "I can learn nothing about it, except that it had been there a long time." Where can I find any record of that tent, and what is the date of its invention? What is that gentleman's definition of "a long time"? Can Dr. Aveling affirm that it is not mine? These, I submit, are fair questions when the originality of an invention is in dispute. Why did Dr. Wright copy Dr. Marion Sims's modification of my stem, when he could have seen a *fac-simile* of my original stem in the instrument-case at the Samaritan Hospital (of which he is one of the medical officers), at Coxeter's, at Weiss's, or at my house?

Dr. Wright states: "I carefully searched through all the records" (*vide* Dr. Routh's pamphlet), "but found nothing to help me. I personally investigated the most recent instruments in the stores of three eminent makers—Maw, Coxeter, and Savigny. Failing to find what I required, I devised the instrument described in my paper," &c. After reading this statement, I went to Coxeter's and bought one of my stems, and was informed that a similar one was sold to Dr. Routh on the 3rd of December, 1864, and described and exhibited by him in the same year. The foreman of that establishment also told me that they have always called the instrument and sold it as "Greenhalgh's spring tent," and that they always keep a stock of various sizes, numbered like catheters.

I never affirmed, in writing or otherwise, that my expanding stem could "only be used after the incision of the cervix, or dilatation of it by a sponge or sea-tangle tent." These are the words of Dr. Marion Sims, quoted by Dr. Wright, which I have not and do not endorse. Moreover I have never used a sponge or sea-tangle tent prior to its introduction. Almost every difficulty can be met by size and curve; still I have occasionally had recourse to a dilator.

If Dr. Wright would "very carefully" word his reply, as he has kindly given me the credit of doing, and not impute impressions as to his motives to me and others, but simply adhere to facts, much good might be done by fair and open discussion.

From the pressure of public and private professional engagements, I am sorry I have been prevented from replying earlier to Dr. Wright's letter of the 24th of March.

I am, Sir, your obedient servant,

Grosvenor-street, April 18th, 1866. R. GREENHALGH, M.D.

ON THE FUNCTIONS OF THE CEREBELLUM.

To the Editor of THE LANCET.

SIR,—In your review of Professor Owen's "Comparative Anatomy and Physiology" I find it stated that his views are adverse to the existence of any relation between the cerebellum and the sexual instinct as maintained by Dr. Gall, but in

favour of its more or less intimate connexion with locomotive power. With reference to this point, perhaps some of your readers may be interested to know that at the meeting of the British Association at Bath, in 1864, Mr. Prideaux, a warm advocate of the general soundness of Gall's views as to the special functions of different portions of the brain, read a paper on the Functions of the Cerebellum, in which he adduced evidence to show that the central and lateral lobes had separate functions: the median lobe, or vermiform process, being the great ganglion of the nerves of muscular resistance, giving a perception of the position of the body and its relation to gravity, and being constantly developed in the ratio of the animal's locomotive power and capacity for balancing the body during rapid motion; the lateral lobes being the great ganglion of the nerves of cutaneous sensibility, and always developed in proportion to the development of the cuticular system of nerves.

These views were sought to be enforced by a comparison of the nervous system and physiological manifestations of birds, cetaceans, and bats. The cetaceans were illustrations of the extreme development of the cuticular system of nerves, and equally so of the lateral lobes of the cerebellum. In the porpoise, the size of the cerebellum, compared with the cerebrum, was as 1 to 2½, this unusual bulk being due to the enormous development of the lateral lobes, which equalled in absolute size those of man.

In birds the development of the cuticular system was at a minimum, and equally so that of the lateral lobes of the cerebellum, which were, in fact, quite rudimentary, and consisted almost entirely of the root of the fifth pair of nerves; whilst the development of the median lobe bore the closest relation to the powers of flight, being as 1 to 13 in the slow grey owl, 1 to 11 in the crow, 1 to 6 in the swift hawk, and 1 to 4 in the agile swallow. The bat combined the acute tactile sensibility of the cetaceans with the agility of the bird; and, in conformity, united the large lateral lobes of the former with the large median lobe of the latter. In the common pipistrelle the weight of the cerebellum was ·96 of a grain to a cerebrum of 1·78, being in the proportion of 1 to 1·85.

Gall's mistake in locating sexual feeling in the cerebellum Mr. Prideaux maintains to be rather an error of inference than observation, the convexity of the lower fossa of the occipital bone and their protrusion backwards and downwards being principally due to the development of the under surface of the posterior lobe of the cerebrum, in the same way as the prominence of the eye and pouching of the lower eyelid, indicative of philological talent, is caused by the development of certain convolutions of the under surface of the anterior lobe resting on the roof of the orbit. Gall's views on the functions of the cerebellum were greatly strengthened by several remarkable cases of loss of sexual feeling occurring after sabre wounds of the cerebellum in French soldiers; and for these cases he was indebted to Baron Larrey. The juxtaposition of the parts, combined with the known effects of concussion on the cerebrum, render these symptoms perfectly compatible with the location of the sexual feeling on the under surface of the posterior lobe of the cerebrum.

I am, Sir, your obedient servant,
JAMES GEO. DAVEY, M.D., M.R.C.P. Lond., &c.

Northwoods, near Bristol, April, 1866.

DR. HASSALL'S FLOUR OF MEAT.

To the Editor of THE LANCET.

SIR,—The great importance of the subject must plead my excuse for troubling you with a further communication concerning my Flour of Meat.

This material, as has already been in part explained, consists, in the concentrated form, and with the exception of the water, of the whole of the constituents of the meat, previously freed from bone and visible fat; and is prepared at such a low temperature that these constituents have undergone no essential change whatever; and being reduced to the condition of a fine powder—finer indeed, I am now enabled to state, than even wheat-flour—is introduced into the stomach in such a form, that, supposing gastric juice to be present, its solution is inevitable. Furthermore, in consequence of the nearly impalpable character of the powder, no mastication is required, and no greater effort in swallowing than is necessary in the case of any liquid. It is impossible but that such a material should possess high dietetic value, and indeed the view originally entertained by me of its importance has by further experience and experiment become greatly confirmed.

It is, however, not only necessary that an article of diet should possess intrinsic merits, but it must also be pleasing to the eye and palate. I am glad to state that these requisites are entirely fulfilled, and that with the condition in which the several preparations are *now* manufactured I have to express my complete satisfaction; while I unhesitatingly affirm that no article of preserved food hitherto brought out contains an equal amount of nutriment, and embraces such a combination of favourable qualities, as does my flour of meat. The samples first issued had a certain dryness or roughness, and there was a deficiency of the gelatinous element of the meat, which, moreover, had a disposition to sink in the liquid as a sediment. These objections, entirely due to *mechanical causes*, have now been completely obviated.

But the principal object of my present communication is to point out certain uses of the meat-flour, in addition to those referred to in my previous letter:—

1. A spoonful of it added to ordinary beef-tea or soup will greatly enhance its nutritive properties.

2. When taken as a sandwich, or sprinkled over or mixed up with vegetables, it is often retained by the stomach when solid meat could not be taken, or, if taken, be rejected.

3. In all cases in which food has to be administered by means of the stomach-pump, as in many cases of insanity, when made into beef-tea, soup, or cocoa, it will be found a most valuable nutrient.

4. A similar remark applies where nourishment has to be conveyed into the system by enemata.

5. In all cases in which mastication is impeded from any cause—as from disease of any kind affecting the action of the jaws, or from defective teeth—it affords a ready means, as yet unequalled, of giving nourishment.

6. It is most valuable as a nutrient after parturition.

7. It is found most serviceable in many cases of dyspepsia.

8. There is no form of nourishment short of the solid meat itself so suitable in diabetes. It is scarcely necessary, however, to remark that the meat-flour should be used pure, and that neither starch nor sugar should be added when preparing from it beef-tea or soup.

9. It promotes nutrition, and so hastens recovery, in low fevers.

I remain, Sir, your obedient servant,
Wimpole-street, April 23rd, 1866. ARTHUR H. HASSALL, M.D.

THE HYPODERMIC METHOD OF INJECTION.

To the Editor of THE LANCET.

SIR,—The Scientific Committee appointed by the Royal Medical and Chirurgical Society to investigate the Physiological and Therapeutical Effects of the Hypodermic Method of Injection is desirous of obtaining from the medical profession, generally, communications of any facts bearing on the subject; and, knowing your courtesy in matters of this kind, they have directed me to ask you to aid them in their appeal by the insertion of this letter in your columns.

The Committee requests to draw the attention of medical men to the following points:—

Whether the drug acts in the same way by the skin, the mouth, and the rectum.

Whether the effects are more or less rapid, or energetic, or permanent by the skin than by the other methods of administration.

Whether any local effects follow the hypodermic injection.

Communications may be addressed to me at the Society's rooms in Berners-street.—I am, Sir, yours faithfully,
REGINALD E. THOMPSON,
April, 1866. Secretary to the Committee.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—Will you be kind enough to allow the following appeal to appear in THE LANCET; it is made in behalf of the orphan children of the late Mr. Cheesewright, who, until recently, held the appointment of medical officer to the Sturminster district of the Sturminster Union. His death, which occurred suddenly on the 28th ult., has left a family of five children entirely unprovided for.

We, the undersigned medical officers of the Sturminster Union, beg to commence a subscription, trusting that, by your

influence, it may be extended and contributed to by union medical officers and the profession generally.

(Signed) JOHN WILLS, M.D., Child Okeford.
J. TARZEWELL, Sturminster.
R. G. LONG, Stalbridge.
J. C. LEACH, Sturminster.

Sturminster Newton, Dorsetshire, April, 1866.

P.S.—Subscriptions will be received by either of the above, and thankfully acknowledged in THE LANCET.

First List of Subscriptions.

	£	s.	d.
Dr. Symonds, Clifton	3	3	0
Dr. Wills, Child Okeford	5	5	0
J. Tarzewell, Esq., Sturminster Newton ...	5	5	0
R. G. Long, Esq., Stalbridge	1	1	0
J. C. Leach, Esq., Sturminster Newton ...	1	1	0

LOCAL ANÆSTHESIA.

To the Editor of THE LANCET.

SIR,—I write to inform you that I have been applying local anæsthesia, with the instrument invented by Dr. Richardson, with great success in operations on the rectum.

Twice last week I applied the ether spray in cases on which my friend Mr. Allingham operated. In the first, one of hæmorrhoids, all external, I used the double cross jets, such as dentists use, and by this means was able to play upon both sides of each hæmorrhoid at the same time. It took eight seconds to blanch the parts, and the patient was entirely unconscious of pain.

In the second case, one of fistula, a director having been passed through and out at the anus, I applied the ether in a single very fine stream along its course, a knife following the jet. The patient felt nothing of the cutting part of the operation.

I am, Sir, yours faithfully,

St. Helen's-place, E.C., April 17th, 1866. SIDNEY CHATER.

*** Messrs. Weiss and Sons have introduced an improved spray-producer for local anæsthesia, on the original model of Bergson, but worked by a foot-bellows. It produces anæsthesia over a limited surface in thirty seconds, and by the expenditure of one drachm of ether.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

A VERY formidable outbreak of cholera has occurred on board the *England*, from this port. This vessel is one of the National Steam Company's steamers sailing between Liverpool and New York. I am indebted to the secretary of the Company for the following particulars, which are mainly derived from a letter received from the captain. The *England*—Capt. Grace—sailed from the Mersey on the 28th of March, with 37 cabin and 1059 steerage passengers, and a crew of 122 men: in all, 1218 souls. The steerage passengers consisted chiefly of Germans, the majority of whom were from Holland (East Friesianders), and amongst them were a great number of children. These people were of the lowest class, extremely dirty in their habits, all dressed in linsey-woollen clothing, and their diet consisted almost entirely of the sour kraut that they had prepared before sailing; they actually refused the food provided for them on board the vessel. The captain writes that some days after leaving Queenstown the cholera broke out amongst them; that in two days it began to spread fearfully quick, first amongst the steerage passengers, then amongst the crew, especially the firemen, four of whom, and the steerage steward, quickly succumbed. The captain made for Halifax as the nearest port, there, if possible, to check the spread of the disease. On the 13th of April, when he wrote, 140 deaths had occurred in the steerage, none in the cabin; but he adds, "they are still dying rapidly: some 50 more are dying now, and how many more will die God only knows." On arriving at Halifax the sick were at once removed, some to tents on shore, and others to a Government hulk lying near. These are all the particulars that are yet known. The *England* is one of the finest vessels belonging to the Company, is nearly new, of 3307 tons burden, and registered to carry 1100 passengers.

The death-rate of this town having lately risen to 57 per 1000, and being thus greatly in excess of any other town in the kingdom, is attracting considerable attention. Liverpool stands first on the black list of the Registrar-General, and is quoted by all who pay any attention to death-statistics, as the most unhealthy town in Great Britain. Of course, with such a character it is shunned by many as not being a very safe place to reside in, and its authorities are abused by all for not having adopted more effectual sanitary measures. With this bad name attached to us, it is time we should say a word for ourselves, and though not prepared to impugn the statistics, but believing that they are computed with scrupulous care as far as Liverpool is concerned, it yet will not be difficult to show—1st, that the great majority of deaths (perhaps between seven-tenths and eight-tenths) occur amongst the labouring classes; and 2ndly, that whilst defective sanitary arrangements and overcrowding have been prominently enough brought forward, sufficient stress has not been laid upon the moral causes which have to do with this great mortality.

In support of the first statement, the opinion of nearly all the medical practitioners of Liverpool unconnected with parish, dispensary or club practices, might be produced to prove that instead of a greater proportion of deaths having occurred during the last few months in their practices than at any former period, there have been positively fewer, and many could point to the years when scarlet fever and diphtheria prevailed so frightfully, that in those years more leaves were taken out of their death-certificate books than in any subsequent corresponding period. This is the more remarkable because sickness has, up to very recently, been more than usually prevalent amongst the middle and higher classes. But one conclusion can be drawn from this, and that is, that the attendant circumstances, such as previous state of health, surrounding atmosphere and conditions, mainly influence the result; or, in other words, that a person in previous good health, and well tended during his illness, will recover from an attack of typhus fever or pneumonia, whilst a poor weakened, ill-conditioned pauper will often succumb to a slight disease, and inevitably to a formidable one. Still further to prove who are the classes amongst whom deaths occur most often, the medical officer of health has, in his weekly returns, shown that it is those who live by weekly wages who are the chief sufferers by typhus fever. Thus, of 55 deaths from typhus in the week ending March 24th, 53 belonged to that class. For the twelve weeks ending March 24th, 589 persons died from typhus, and 545 of these were of the weekly wages class; and of the remaining 44, no less than four were medical men, one was a priest, and three were licensed victuallers.

The second important point is the sad moral condition of thousands in this town. The excessive use of intoxicating drinks has become almost universal amongst the lower orders, and, as a necessary sequence, privation to a frightful extent exists amongst them. One of the startling facts shown by the weekly returns of Dr. Trench is the preponderance of deaths amongst children. A reference to the appended table will show that about one-half of the deaths occur in children under five years of age, and rather more than one-fourth in those under one year. The puny, half-fed, half-clothed children of drunken fathers or mothers quickly succumb in the cold season to the many ills they are exposed to. Another evil, which has not been sufficiently noticed, but which materially influences the health of the lower orders, is the large quantities of unwholesome food, in the shape of meat, fish, poultry, and vegetables, which, in consequence of its cheapness, is consumed by them. A third evil is the unhealthy occupations of many of the working classes. These three causes alone might suffice to explain the origin of the diseases that prevail among them; and (as they are generally associated) we have but to add destitution, overcrowding, and defective sanitary arrangements to the other causes, to explain the very frequent fatal termination of diseases.

Of the evils mentioned, there are only three which can be fairly said to come within the province of the Health Committee to deal with. They are, overcrowding, a defective sanitary state, and the sale of unwholesome food; and these are, in a town like this, formidable enough to grapple with, and the attempt to do so has been attended with difficulties, many of which seem almost insurmountable. Still, the Committee have effected a great amount of good in the many courts and alleys they have closed, in the houses they have pulled down, in the complete system of drainage they have carried out in the worst districts, in the more abundant water-supply, in the variety of measures they have adopted to destroy infection, and in the vigilance they require their in-

spectors to exercise. Of course there is much in the way of sanitary measures yet to be done, but I believe the delay is owing to the difficulties they have to contend with, rather than to any apathy or unwillingness on the part of the Committee. The disheartening fact remains, that all their efforts must have but limited success whilst drunkenness, with its attendant evils, is the prevailing vice of tens of thousands of the population. The local press contains frequently leading articles, as well as letters, lamenting its extent; whilst ministers of religion, and all who are brought in contact with the lower orders, see in drunkenness the chief cause of the destitution, misery, and sickness that abound.

The following table is compiled from the weekly returns of the medical officer of health, and gives the chief causes of the deaths that have occurred during the first quarter of this year—viz., to the 31st of March.

The main facts connected with this table are: that there have been 1183 deaths above the average in three months, and nearly 900 of these in the month of March alone; that this increase has not been so much in typhus, which has remained above the average only to the same extent as it has been for some months, and much below what it was at this time last year; that the great increase has been in the deaths from whooping-cough, and from diseases of the lungs and air-passages.

Liverpool, April 24th, 1866.

Mortality of Liverpool from January 1st to March 31st, 1866.

—	All causes.	Above 10 years' average.	Typhus.	Above average.	Small-pox.	Whooping cough.	Above average.	Measles.	Scarlet fever.	Diarrhœa.	Lung-disease.	Inquests.	Children. Below 5 years.	Children. Below 1 year.
Jan. 13th ...	389	57	45	26	—	13	below	15	16	4	123	21	202	120
20th ...	410	64	61	42	2	13	below	13	20	4	148	19	182	115
27th ...	386	28	51	32	3	15	—	12	16	8	113	26	180	112
Feb. 3rd ...	378	40	48	29	3	13	—	9	20	7	109	14	188	106
10th ...	346	22	50	31	—	18	5	11	18	5	99	22	147	81
17th ...	408	72	42	25	5	17	4	13	14	5	112	25	192	121
24th ...	367	23	47	29	3	12	—	12	15	12	112	11	152	91
March 3rd ...	421	109	49	32	2	25	13	8	12	9	158	—	174	114
10th ...	515	197	56	38	7	38	25	11	15	—	169	78	226	125
17th ...	530	231	45	29	4	36	23	7	12	7	206	19	248	152
24th ...	530	209	55	39	—	45	34	7	13	—	216	—	241	140
31st ...	444	131	42	23	—	35	26	8	15	—	140	23	236	137
Total	5124	1183	591	375	29	280	130	126	186	61	1705	258	2368	1414

Parliamentary Intelligence.

HOUSE OF LORDS.

APRIL 19TH.

CATTLE BILLS.

THE Cattle &c. Contagious Diseases Bill, and the Cattle Sheds in Burghs (Scotland) Bill passed through committee.

The standing orders having been suspended, these Bills were read a third time and passed.

APRIL 20TH.

THE STRAND UNION WORKHOUSE.

The Marquis TOWNSHEND asked her Majesty's Government what explanation could be given for the continuance of the practice of carpet-beating in the Strand Union Workhouse. Would it be credited that in the infirm ward of the Strand Union, there were only 434 cubic feet of air given to each pauper, and in the sick ward 700 feet, while, according to the recommendations of the Poor-law Board, upwards of 1000 cubic feet of air ought to be given to each inmate, and less than that was injurious to health.

Earl GRANVILLE said that acording to the information he had received from the Poor-law Board, the medical officers of the union did not object to the carpet-beating, and that it was necessary to find some employment for the able-bodied paupers. With respect to the casual wards, the Poor-law Board had not received any complaint on the subject, but additional wards had been constructed, and about three weeks since the inspector reported all the arrangements satisfactory and the establishment well managed. With regard to the number of cubic feet of air, the noble marquis had made a mistake in quoting the figures laid down by the Poor-law Board. The Board thought that from 300 to 400 cubic feet of air were necessary for each inmate—not 1000, as the noble marquis had stated.

CATTLE DISEASES ACT.

Earl GRANVILLE, in answer to a question, said he had already stated that with regard to the experiments to be made on the treatment of animals suffering from the cattle plague, Government had entrusted them to commissioners who were very able men, and who thought it better not as yet to communicate the results of their experiments. The commissioners had reserved their report, but it would be ready by the end of the month, and, if necessary, would be laid before the House.

APRIL 24TH.

Lord REDESDALE, in moving to refer the West Middlesex Water Bill to a Committee of the whole House, called attention to the increasing quantities of water annually withdrawn from the Thames by water companies, and suggested that new districts should be required to obtain their supplies from other sources.

APRIL 25TH.

SMALL-POX IN THE ROYAL NAVY.

The Earl of ELLENBOROUGH regretted to see by that morning's intelligence from India that her Majesty's ship *Octavia* had put into Bombay with 175 men ill on board from small-pox. He wished to know what precautions were established to prevent small-pox in the Royal navy?

The Duke of SOMERSET said the regulation in force was that no one should be received on board the Royal navy who either was not vaccinated or who refused to be vaccinated. Where vaccination was necessary it was performed as speedily as circumstances would permit. With regard to the *Octavia* it was probable the disease was introduced by some coolies taken on board; and his information was to the effect that the disease had shown itself in a very mild form, and was not likely to extend.

HOUSE OF COMMONS.

APRIL 19TH.

THE CHOLERA.

Sir J. C. JERVOISE asked whether the attention of the medical officer of the Privy Council had been directed to a statement that the Emperor and Empress of the French had visited the cholera hospitals in Paris, and that M. Gustave Girard had made experiments in demonstration of the non-infectious nature of the cholera.

Mr. BRUCE said the attention of the medical officer of the Privy Council, along with the rest of the public, had been attracted to the act of courage and humanity performed by the two illustrious persons mentioned; and the medical officer was also aware of the very daring experiments which had been made by M. Gustave Girard; but in spite of those experiments it was by no means established that cholera was non-infectious.

(Hear.) On the contrary, the precautions which were being at present taken by the French Government in connexion with this subject justified the medical officer of the Privy Council in holding the opinion which he did.

APRIL 20TH.

CONTAGIOUS DISEASES BILL.

Lord C. PAGET brought up the report of the select committee on the Contagious Diseases Bill, which was ordered to lie on the table.

PUBLIC HEALTH ACTS.

Mr. BRUCE said, in answer to a question, he hoped to be able very shortly to lay upon the table a Bill for the amendment of the Public Health Acts. That measure would not, however, contain any clauses relating to the pollution of rivers. It would deal with that question as far as the Thames Valley was concerned.

THE SMOKE NUISANCE.

Sir G. GREY, in reply to a question by Sir R. Peel, said that he had addressed a circular letter to some of the largest towns in the kingdom, and the answer showed that in every one of those towns there was a law in force requiring the consumption of smoke; but great variety existed as to the manner in which such law was enforced. He would lay the circular before the House, together with a tabulated statement of the substance of the answers received. A Bill was now in preparation by the President of the Council, one object of which was to provide some summary mode of suppressing the smoke nuisance and other similar evils, and compelling local authorities to do their duty. (Hear.)

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners on the 24th inst.:—

Anderson, David Hawley Burn, Edinburgh.
Baron, Thomas, Ulceby, Lincolnshire.
Booth, James Webb, Huddersfield.
Burn, William Barnett, Limehouse.
Casson, John Hornsey, Ironville, Derbyshire.
Crew, Eli, Tetbury, Gloucestershire.
Crowther, Edward Lodewyk, Hobart Town.
Ditchett, William Edwin, Louth, Lincolnshire.
Evans, Arthur Griffith, Narberth, Pembrokeshire.
Ferguson, Hugh, Haverstock-hill.
Fowke, Frederick Wm., Byfield, Northamptonshire.
Goodall, Joseph, Walworth.
Husband, Henry Aubrey, Jamaica.
King, Henry Kirwan, Camberwell.
Mackenzie, Frederic Morell, Tiverton, Devon.
Matthews, Arthur, Salehurst, Sussex.
Maynard, Henry, Durham.
Moore, Richard Bond, Wolverhampton.
Owens, Edward Matthews, Sutton, Surrey.
Snape, George Henry, Liverpool.
Spearman, George, Plymouth.
Square, William, Plymouth.
Warlow, Henry, Haverfordwest.
White, Samuel Shapland, Barnstaple.
Williams, John, Fishguard, Pembrokeshire.

Admitted Members on the 25th inst.:—

Bailey, Thomas, Gough-street North.
Colquhoun, Frederic Steuart, Tiverton, Devon.
Creed, John Mildred, Melbourne, Australia.
Farley, Frederick Baldock, Cretingham, Suffolk.
Goodwin, Arthur, Chesterfield.
Haynes, Frederic Harry, Eversham, Worcestershire.
Horder, Thomas, Salisbury.
Ireland, Edward, Kendall, Westmoreland.
Jackson, Mowbray, Bowbuckhill, Bucks.
Leggatt, Alfred John, Lowndes-square.
Leverton, Edward James, Truro, Cornwall.
Lucas, George, Burwell, Cambridgeshire.
Morris, Henry, Petworth, Sussex.
Poore, George Vivian, Andover.
Reid, Lestock Holland, Toronto, Canada West.
Richardson, William Edmond, Leeds.
Rule, William Bennett, Maida-hill.
Sargent, Jas. Forbes, Bentinck-terrace, Regent's-park.
Stocks, Frederick, Wakefield.
Tay, Waren, Worcester.
Upton, Herbert Chrippes, Petworth, Sussex.

(From the list of gentlemen who passed the Primary Examination at the College on the 11th inst., the name of Thomas Smith, of St. Bartholomew's Hospital, was accidentally omitted.)

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 19th inst.:—

Fothergill, Thomas Prince, Bedale, Yorkshire.
Langdon, Chas. George, St. Bartholomew's Hospital.
Robinson, James, Ulverstone, Lancashire.
Tily, James, Walkern, Herts.
Woodcock, Samuel, Glossop, Derbyshire.

The following gentlemen also on the same day passed their first examination:—

Edwards, Edward Noble, Guy's Hospital.
Evans, Ernest Thomson R., St. Bartholomew's Hospital.
Gronow, Owen Tudor, St. Mary's Hospital.
Wiseman, John Greaves, Guy's Hospital.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—The undermentioned gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 12th inst.:—

Harry Darrill Glaister, Southwell, Notts.

UNIVERSITY OF ABERDEEN.—At the late Medical Graduation Term the following candidates received promotion to the degree of M.D.:—

Atkinson, Fred. Page, Kew, Surrey.
Colborne, Anthony Chas., London.
Fowler, John Smith, Aberdeen.
Gray, Alex. Riddoch, Aberdeen.
Ogston, Alexander, Aberdeen.
Saunders, Chas. Edward, Cuckfield, Sussex.
Smith, James Dear, Mayo.
Snaith, Francis, Boston, Lincolnsh.
Strange, Wm. Heath, London.

And the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

THE DEGREE OF M.B.

Aitken, Wm. Scott, Greenock.
Atherstone, E., Cape of Good Hope.
Attygalle, John, Ceylon.
Carter, Rich., Newbury, Berkshire.
Edgelow, G., Teignmouth, S. Devon.
Freeman, A. J., Southsea, Hants.
Gibbes, J. Murray, Sidmouth, Devon.
Gordon, Wm. Robert, Banffshire.
Graham, Benjamin, Morayshire.
Grant, Robert, Banffshire.
Lethbridge, A. Swaine, Devonshire.
Lupton, Richard John, Bradford.
Maconachie, George, Forgue.
Manson, Patrick, Aberdeen.
M'Donald, W., Cromdale, Morayshire.
Morgan, Lewis Wayne, Pontypridd, Glamorganshire.
Nicolson, David, Aberdeen.
Rayner, Henry, Hythe, Kent.
Tibbits, Robert William, Bristol.
Tidy, Charles Meymott, Hackney.
Wadd, Frederick John, London.
Williamson, James, Aberdeen.

THE DEGREE OF C.M.

Aitken, William Scott.
Atherstone, Edwin.
Edgelow, George.
Gibbes, John Murray.
Gordon, William Robert.
Graham, Benjamin.
Grant, Robert.
Lethbridge, Alfred S.
Lupton, Richard John.
Maconachie, George.
Manson, Patrick.
M'Donald, William.
Morgan, Lewis Wayne.
Nicolson, David.
Rayner, Henry.
Tidy, Charles Meymott.
Wadd, Frederick John.
Williamson, James.

Of the above-mentioned candidates, the following received their degrees in Medicine and Surgery with *Highest Academical Honours*:—

Aitken, William Scott. | Rayner, Henry. | Tidy, Chas. Meymott.

And the following received their degrees in Medicine with *Academical Honours*:—

Edgelow, George. | Nicolson, David. | Williamson, James.

At the same time the undermentioned gentlemen were certified as having passed all the examinations, and are entitled to receive degrees on their attaining the necessary age:—

Davidson, Alexander Dyce. Hughes, John Thomas.

And the following were declared to have passed part of their examinations:—

Charles Adam, John Arthur, James Cameron, Joseph Carbery, James Allan Coutts, Matthew Dickson, J. K. V. O. D'Uminy, Alex. G. Duncan, Charles Edward Hocken, Francis W. Jackson, Sydney Johnson, Hugh Johnstone, Joseph F. Keith, Charles Maclean, Alexander M'Arthur, Donald M'Ewen, Robert M'Pherson, Douglas Moir, William Mull, Arthur H. Nowell, James Allan Philip, Francis W. Smith, Arthur Stephen, David Tulloch, Francis A. Van Der Smagt, Alexander Wilson.

The next professional examination for degrees in Medicine commences on Saturday, July 28th, 1866.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—On the 5th inst., at the quarterly meeting of the President and Fellows, the following gentleman was duly elected a Fellow:—

Dr. Arthur Wynne Foot.

Licences to practise Medicine were granted to the following gentlemen during the months of January, February, and March, 1866:—

Adrian, Edw. Wm., Co. Dublin.
Banks, Samuel Henry, Wicklow.
Brady, Patrick, Co. Cavan.
Fagan, John.
Fryer, Charles, Lancashire.
McDermott, Stephen, Roscommon.
Moore, David, Belfast Hospital.
Stephenson, E. Aleysius, Kilkenny.
Stirling, James, Co. Kilkenny.
Tuite, Patrick Walter, Dublin.
Walsh, William, Kilmuckridge.
Watkins, Wm. Longworth, Dublin.
Welsh, Joseph Irwin, Co. Donegal.

To the following gentlemen Midwifery diplomas were granted during the same term:—

Fagan, John.	Stephenson, E. Aloysius, Kilkenny.
McGloin, P. F., Co. Mayo.	Stirling, James, Co. Kilkenny.
Moore, David, Belfast.	Watkins, William L., Dublin.
Purdon, Rowan, Tralee.	Welsh, J. Irwin, Ballyshannon.

THE deaths registered in London during last week were 1532. This exceeds the estimated number by 120.

THE cholera has made its appearance at Ste. Brienne, in Brittany.

IT has been determined at St. Bartholomew's Hospital, Chatham, to institute ophthalmic wards.

NO less than 150 deaths occurred on board the steamer *England*, from cholera.

ON Monday evening a meeting on the capital punishment question was held at the rooms of the Social Science Association.

MR. J. W. CLARK, M.A., Fellow of Trinity, has been elected Superintendent of the Museums of Zoology and Comparative Anatomy at Cambridge.

THE nurses of Padiham, near Blackburn, have followed the fashion of the day, and claim a rise of ten per cent. on their pay.

AT the meeting of the Nursery and Children's Hospital, in New York, it was stated that there were in the institution seven mothers under fifteen years of age.

THE vacant natural science demyship at Magdalen College, Oxford, has been awarded to Frederick John Hicks, servitor of Christ Church.

THE Sanitary Conference at Constantinople has decided that lazarettos shall be established in the vicinity of certain towns in Asia Minor. One of these lazarettos is to be built on an island near Smyrna.

AN official notice has been published at Manchester ordering all dogs to be confined from the 23rd inst. to the 1st of October, and attaching a penalty to the non-observance of the order.

A COMMITTEE of the Lords of the Hon. Privy Council sat on Saturday, in the Council Chamber, Whitehall, on the subject of the cattle plague. The metropolis showed a decrease during last week of twenty-two cases.

EVIDENCE is being taken by the Select Committee of the House of Commons appointed to consider the important question of the health of the forces as affected by preventable diseases.

A DEPUTATION from the parish of St. James, Westminster, consisting of Mr. Weymouth, Mr. Compton, Mr. Duff, Mr. Webber, Dr. Edwin Lankester, and Mr. Buzzard, transacted business with the Right Hon. H. A. Bruce, at the Privy Council, Whitehall, on Friday.

AT a meeting of the guardians of St. George's, Hanover-square, held the other day, the appointment of Mr. H. B. Farnall, C.B., together with Dr. Smith, to visit and report upon the state of the metropolitan infirmaries was discussed at great length, all present being in favour of the appointment of Dr. Smith and against that of Mr. Farnall.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The fourteenth annual festival of this admirable institution took place on Thursday last, at Willis's Rooms. Sir William Fergusson, Bart., occupied the chair, and was supported by a very numerous and influential company. We shall give a full account of the meeting in our next impression.

SURREY COUNTY HOSPITAL.—The election of honorary medical officers took place on the 17th inst., when Mr. H. S. Taylor, Dr. J. Stedman, and Mr. R. Eager were appointed; the assistant honorary medical officers, Mr. J. Morton, Mr. T. Butler, and Mr. Schollick, having been elected three weeks previously.

NORTHERN COUNTIES' ASYLUM FOR IDIOTS AND IMBECILES.—An influential meeting was recently held in the Town Hall, Manchester, for the purpose of promoting the establishment of an institution for the training and education of idiotic and imbecile children and young persons. The Mayor, Mr. Boker, took the chair. Dr. De Vitre and Mr. Harrison, from Lancaster, attended to give explanations of the scheme, which was started some fifteen months ago under the auspices of Sir J. Kay Shuttleworth, who on this occasion could not be present. The Bishop of Manchester, Sir E. Armitage, and Mr. Hugh Mason expressed sanguine expectations of the advantages of the plans of the promoters. Mr. Fernley, Rev. S. A. Steinthal, Rev. Canon Richson, and Mr. W. R. Wood proposed resolutions which were strongly supported, and a handsome subscription was announced. The amount from Manchester alone was above £2000. The institution is planned on the Pavilion principle, for accommodating 300 inmates, but is to commence with 200, the remaining accommodation to be extended when required.

WE are happy to learn that a further practical amelioration has been effected in the management of one of the London workhouse infirmaries by the resolution just adopted by the guardians of the Strand Union to abolish the carpet-beating nuisance which our reports described and exposed. This venerable abuse had held out against much and earnest expostulation.

THE committee of management of St. Vincent's Hospital, Dublin, have purchased the handsome residence known as Lyndon Castle, Blackrock, for the purpose of converting it into a sanatorium, to which they purpose sending the convalescent patients to enjoy the benefit of country air, seabathing, &c., previous to returning to their homes. This is the first establishment of the kind in Ireland, and the example is well worthy of imitation, for there are other hospitals in Dublin which, from their less favourable situation as to pure air, require such an appendage much more than St. Vincent de Paul's.

THE mayor and corporation of Manchester have granted for the use of the Social Science Association at their meeting in October next, the assize court and other accommodation, and local officers have been appointed for the different sections. Rev. S. A. Steinthal, who acts as local general secretary, has made arrangements for a successful meeting, while the influential inhabitants have provided a guarantee fund of £10,000.

A MORNING CONCERT will be held, by the kind permission of Messrs. Collard and Collard, at their rooms, Grosvenor-street, Grosvenor-square, on Friday, May 25th, at three o'clock, for the benefit of the widow and imbecile son of the late Mr. W. Dundas Key, surgeon, of Islington. The kind support of the profession, friends, and the public is most earnestly solicited for this urgent case by Mrs. de Lisle Allen, to whom all communications are requested to be addressed, 57, Connaught-terrace, Hyde-park, W.

A MURAL monument has just been placed in the parish church, Lancaster, in remembrance of the late highly esteemed Dr. J. J. Clarkson, who, after more than twenty years' practice in Lancaster, relinquished his profession owing to his own failing health and the delicate state of his only son, and died in Switzerland in June last, after a serious illness of four months' duration. The tablet is of white marble, of very neat design, and has been executed by Mr. Fawcett, of Lancaster. It bears a suitable inscription, and refers also to the death of Dr. Clarkson's only daughter, which took place in France, in May, 1864.

Obituary.

DR. E. J. SEYMOUR, F.R.S.

WE have with regret to record the death of another distinguished member of our profession. Dr. Seymour expired at his house in Charles-street, Berkeley-square, on Monday morning, the 16th inst. He had been confined to his house about a month in great suffering from organic disease of the stomach and liver.

Dr. Seymour, after taking his degree at Cambridge, passed his first years of professional life in Italy, and on returning to England soon rose into a high class of practice, great part of which he retained till his last illness. Not long after his return to England he was elected Physician to St. George's Hospital, in which office he was highly esteemed as an able physician and a kind friend to the younger members of the profession. He was a man of accomplished mind, and possessed considerable attainments besides his professional knowledge. His judgment on medical subjects was greatly relied on, not only by his patients, but also by all who met him in consultation, on which occasions he was esteemed an excellent leader. Having held the office of Commissioner in Lunacy, he latterly devoted much of his attention to insane cases.

Dr. Seymour was supported in his last illness by the most devoted attention of his wife and daughter, the only members of his family circle not dispersed through the numerous breaks by deaths and marriages. He was a Fellow of the Royal Medical and Chirurgical Society of London, member of the Royal Medical and Wernerian Societies of Edinburgh, and the Imperial and Royal Societies of Sienna. He was author of works "On Diseases of the Ovaria," "Medical Treatment of Insanity," "On Dropsy," "Thoughts on the Treatment of several Severe Diseases of the Human Body," "On Tumours in the Abdomen," "Letters to Earl Shaftesbury respecting Lunatics," "On some of the Diseases of the Stomach," and "On the Specific Effect of Atmospheric Poison in the Production of Disease."

DR. JAMES ALLARDYCE.

THE death of this gentleman occurred at his residence in Cambray on the 7th inst. He was, we believe, the oldest member of the medical profession in Cheltenham, having more than forty years, and down to within a few weeks of his decease, successfully practised as a physician. Born at Banff in 1782, Dr. Allardyce received his early education at Marischal College, Aberdeen, and thence proceeded to Edinburgh, where he entered as a medical student. He subsequently removed to London, where he became the pupil of Dr. Saunders. Having passed his examination at nineteen, he soon after went out to India as Assistant-Surgeon to the 19th Dragoons, and was present at the Battle of Assaye, in Sept. 1803, for which he received a medal. He subsequently had charge of the wounded in the field hospital at Adjunta; and was attached for a time to the Turkish and Persian Embassies—and returned to England with the 19th Dragoons. He soon after became attached to the 9th Foot, and, with that regiment, was present at the Battles of Roliça and Vimiera, for which engagements he received a medal and two clasps. He was also in the retreat to Corunna. On his return to England he was appointed to the 2nd Dragoon Guards. In 1814 he exchanged with Mr. Abercrombie—father of Dr. Abercrombie, of Suffolk-square—and returned to India as Surgeon of the 34th Foot. He finally retired from the service in 1822, in which year he settled in Cheltenham, where he afterwards resided and obtained an extensive practice, possessing the full confidence of his patients, and being generally and much esteemed by all who had the happiness of his acquaintance. The contemporary of Dr. Boisragon, Dr. Baron, Mr. Seager, and Mr. Charles Fowler, Dr. Allardyce was highly and deservedly respected among the members of his own profession, who wished, especially, to give expression to their feelings by following his remains to the grave. But as it had been his own express wish that his funeral should be as quiet and private as possible, his family were compelled to decline this gratifying mark of professional regard, and his remains were, accordingly, interred in the Old Cemetery, on the 12th inst., as unostentatiously as possible.—*Cheltenham Looker-on.*

MEDICAL APPOINTMENTS.

E. ADAM, L.K.Q.C.P.I., has been appointed Medical Officer for District No. 5 of the Parish of Liverpool, vice H. B. Watters, L.R.C.P.Ed., deceased.

H. C. BASTIAN, M.A., M.R., F.L.S., has been appointed Lecturer on Pathological Anatomy and Morbid Histology, and Curator of the Museum, St. Mary's Hospital.

S. J. B. CALDWELL, M.R.C.S.E., has been appointed Medical Officer for District No. 6 of the Parish of Liverpool, vice A. R. Beckett, L.F.P. & S. Glas., deceased.

R. COLTHURST, M.D., has been appointed Medical Officer to the Workhouse of the Keynsham Union, Somersetshire, vice W. Hutchins, M.R.C.S.E., deceased.

D. W. DAVIES, M.D., has been appointed Medical Officer for the Llantrissant District of the Pontypridd Union, Glamorganshire.

H. N. DAVIES, L.R.C.P.Ed., has been appointed Medical Officer for the Cymmer District of the Pontypridd Union.

H. DODGSON, M.D., has been appointed Medical Officer for the Cockermouth No. 1 District and the Workhouse of the Cockermouth Union, Cumberland, vice H. Bell, L.R.C.P.Ed., resigned.

R. EAGER, M.R.C.S.E., has been appointed an Honorary Medical Officer to the Surrey County Hospital, Guildford.

M. A. GLEESON, L.A.H.D., L.M., has been appointed Assistant to the Resident Medical Officer of the Holloway and North Islington Dispensary.

E. M. GRACE, M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Chipping-Sodbury Union, Gloucestershire, vice W. Marsh, M.R.C.S.E.

S. B. GWYNN, F.R.C.S.E., has been appointed Medical Officer for the Wem District and the Workhouse of the Wem Union, Salop, vice E. Gwynn, M.R.C.S.E., resigned.

S. N. HARRISON, L.R.C.P.Ed., has been appointed Surgeon-Accoucheur to the Kilham Lying-in Dispensary, vice T. F. Atkinson, M.R.C.S.E., deceased.

H. S. KANE, M.D., has been elected Medical Officer and Public Vaccinator for the Antrim Dispensary District of the Antrim Union, vice M. Weir, M.R.C.S.E., who was elected, but declined the appointment.

Mr. T. L. LACK has been appointed Assistant to the House-Surgeon to the Chichester Infirmary, vice Mr. W. Pippette, resigned.

Dr. M'DONALD, of Dalmellington, has been elected House-Surgeon to the Ayr, Newton, and Wallacetown Dispensary and Fever Hospital, vice R. B. Erskine, M.D., resigned.

S. MASON, L.F.P. & S. Glas., has been appointed Medical Officer for the St. Blazey District of the St. Austell Union, Cornwall, vice Taylor, deceased.

J. B. MAURICE, M.D., has been appointed Medical Officer for District No. 1 of the Marlborough Union, Wilts, vice D. P. Maurice, F.R.C.S.E., resigned.

W. P. MURPHY, L.R.C.S.I., has been appointed Medical Officer for the Cockermouth No. 2 District of the Cockermouth Union.

T. C. NESHAM, M.D., has been appointed Medical Officer for District No. 1 of the Newcastle-upon-Tyne Union, vice J. S. Pearse, M.D., deceased.

F. PAGE, M.D., has been re-appointed Medical Officer for the Workhouse of the Portsea Island Union.

E. PINDER, L.R.C.P.Ed., has been appointed Medical Officer for the Camberwell District of the Parish of St. Giles, Camberwell, vice J. Otley, F.R.C.S.E., resigned.

G. B. PRICKETT, M.R.C.S.E., has been appointed Medical Officer for the Bampton District of the Witney Union, Oxfordshire.

J. F. PRITCHARD, M.R.C.S.E., has been appointed Medical Officer for the Kingston District of the Portsea Island Union.

T. S. REED, M.R.C.S.E., has been appointed Medical Officer for the Workhouse and the Stithians District of the Redruth Union, Cornwall, vice J. Permewan, M.R.C.S.E.

J. C. ROBINSON, L.R.C.P.Ed., has been appointed Medical Officer for the Kilburn District of the Thirsk Union, Yorkshire, vice H. Skaife, M.R.C.S.E., resigned.

A. E. SANSOM, M.B., has been appointed Hon. Medical Officer to the Booksellers' Provident Institution, vice A. M. M'Whinnie, F.R.C.S., deceased.

T. SHALLHORN, M.R.C.S.E., has been appointed Medical Officer for the Eynsham District of the Witney Union, Oxfordshire.

J. R. SPEDMAN, M.D., has been appointed an Honorary Medical Officer to the Surrey County Hospital, Guildford.

Dr. A. TAYLOR has been elected Medical Officer and Public Vaccinator for the Pitminster District of the Taunton Union, vice G. Cordwent, M.D., resigned.

H. S. TAYLOR, F.R.C.S.E., has been appointed an Honorary Medical Officer to the Surrey County Hospital, Guildford.

W. S. WATSON, F.R.C.S.E., has been appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.

Births, Marriages, and Deaths.

BIRTHS.

On the 14th inst., at Woolwich, the wife of R. Mason, F.R.C.S.E., of a daughter.

On the 15th inst., at Westminster-terrace, Oxford-street, Manchester, the wife of Dr. Gumpert, of a daughter.

On the 16th inst., at Ipswich, the wife of Wm. Alfred Elliston, M.D., of a daughter.

On the 18th inst., at Hanley, Staffordshire, the wife of W. H. Folker, F.R.C.S.E., of a daughter.

On the 18th inst., at Coleshill-street, Eaton-square, the wife of T. Duka, M.D., Surgeon Bengal Army, of a son.

On the 19th inst., at Stock's-hill, Holbeck, the wife of A. H. Cotter, L.R.C.P.Ed., of a son.

On the 22nd inst., at Cranley-place, Onslow-square, the wife of M. Baines, M.D., of a son.

On the 24th inst., at Croydon, Surrey, the wife of H. Townsend Whitling, M.R.C.S.E., L.S.A., of a daughter.

MARRIAGES.

On the 19th inst., at St. Matthew's Church, Brixton, Frederick H. Alderson, M.R.C.S.E., of The Grove, Hammersmith, to Eliza, eldest daughter of Francis Willett, Esq., of Derwent Villa, Brixton-road.

On the 21st inst., at Bray, Hugh M. Brew, M.D., to Henrietta, daughter of John Leney, M.D.

On the 23rd inst., at Coxwold, Dr. Craven Robinson, to Sophie, youngest daughter of the late Maurice Bright, Esq., of Sheffield.

DEATHS.

On the 27th ult., at Canning-street, Liverpool, Thos. Hensman, M.R.C.S.E., L.S.A., aged 58.

On the 8th inst., at Stoke-Illes, Herefordshire, of bronchitis, Francis Davis, Esq., aged 85. In 1805 he was appointed Assistant-Surgeon to H.M.'s Ship "London"; afterwards, and until he retired in 1833, he practised at Tenbury.

On the 10th inst., at sea, on board the "Euxine," on the homeward passage from China, J. A. Yule, M.D.

On the 11th inst., N. Rees, M.R.C.S.E., of Llandilo, Carmarthenshire, aged 78.

On the 16th inst., G. Allbutt, M.R.C.S.E., of Batley, Yorkshire.

On the 16th inst., H. Rickards, M.R.C.S.E., of Alfreton, Derbyshire, aged 65.

On the 16th inst., at Bird's-eye Cottage, Bromyard, W. P. Grape, Surgeon, aged 86.

On the 17th inst., at Upper Leeson-street, Dublin, Charles Edward Spencer, infant son of M. Ryan, M.D., F.R.C.S.

On the 17th inst., at Bellevue House, Exeter, Archibald Elliott, M.D., Surgeon R.N.

On the 18th inst., at Bath, J. M. Johnstone, M.D., late of Demerara.

To Correspondents.

SMALL-POX AND VACCINATION HOSPITAL.

Mr. Marson requests us to correct an error which appeared in our impression of April 14th in reference to some statistics of his collected at the above hospital. It is there stated that the mortality from small-pox has been "70 per 1000 in the unvaccinated, 5 per 1000 in the well-vaccinated, and 150 per 1000 in the ill-vaccinated." The statement should have been: mortality from unvaccinated small-pox, 370 per 1000. The error was with the Vice-President of the Medical Department of the Privy Council.

J. J. J.—1. If our correspondent mean the Oriental and Peninsular Steam Company, he should make application to the Board of Directors.—2. All the information required will be found, under the head of Army Medical Department, in the Students' Number of THE LANCET.

Dr. Walter Young.—His works were printed in 1490. Lanfranc was the first writer to show how to distinguish the wound of an artery from that of a vein.

INJURIES FROM THE BITE OF A RAT.

To the Editor of THE LANCET.

SIR,—Thinking the following case will be interesting to your readers, I beg to forward it for insertion in your journal:—

Albert P——, aged fourteen years, the son of a labourer, was on the 6th or 7th of January last bitten by a rat whilst trying to take it from a trap. The wound was under the nail of the middle finger. It healed quickly, and very little was thought of it. On the 18th of January (ten days after) the boy complained of pains in the teeth and head, and the man with whom he was working said he had been very dull and drowsy the whole day. On the following morning he went to his work; but at noon of the same day he came home, feeling so poorly and suffering so much from toothache and pains in the throat that he could not work. My assistant saw him the same evening. He was then very restless, and trying to bite those who were near him, and occasionally suffering from violent spasms. A dose of calomel, followed by castor oil, was given him. I saw him the next morning. He was still very violent; but I was told he had at times during the night been quite quiet, but that the least noise or movement caused violent fits of spasm and excitement, with painful catching of the breath. He foamed from the mouth, and collected saliva between his lips, and spat deliberately at any person near him. He appeared to know all that was going on about him, took plenty of food, and drank ravenously, opening his mouth widely whenever liquid was brought into the room. He had a perfectly healthy appearance, clean tongue, and good pulse. He had the greatest horror of a looking-glass, screaming and going off in a paroxysm of rigid spasm when he was shown one. The same symptoms were excited if a stranger entered the room. This state of things continued, with occasional periods of quiet, but no sleep, from Saturday, the 20th, to Friday, the 26th of January. I may here mention that on my first visit to the boy I was struck by many of the symptoms being very like those of hydrophobia, and I inquired of the parents if the boy had been bitten by any animal. They at first said no; but afterwards remembered the circumstance of the rat. I make this allusion simply to show that I was not led to the idea of hydrophobia by any foreknowledge of the boy having been bitten. For the first two days of the attack I gave large and repeated doses of chlorodyne, but without any apparent effect. I then tried to administer chloroform; but he was so restless that it was quite impossible to get him to inhale it. Tincture of opium was then given, beginning with twenty minims every four hours; but as this quantity had no effect, it was by degrees increased to forty minims every three hours, and after these doses had been regularly continued about twenty-four hours the paroxysms began to lessen in severity, and on Friday, the 26th of January, he for the first time fell into a quiet sleep, which lasted eleven hours. When he awoke he appeared better, but in a very excited and unnatural state. From this time he appeared to be slowly getting well, till on the 17th of February (a month from the time of his first attack), after playing marbles with the boys in the village, and going without food nearly the whole day, he suddenly became as violent as ever. The laudanum was again given in forty-minim doses every four hours for two days, when he again slept, and up to the present time has had no return of spasm. He is very nervous, cannot bear the noise of children, has great intolerance of light, starting out of his chair if the fire is stirred or any sudden light or noise is produced. His general health is good. I should mention that he has occasionally voided worms, the lumbricus teres, but they never have appeared to affect him in any way.

In my weekly report to the Board of Guardians I have returned this as a case of hydrophobia, not knowing what else to call it, though I can find no case on record in which a rat has been known to produce the disease.

I am, Sir, your obedient servant,

Newick, Uckfield, March 8th, 1866. RICHARD GRAVELY, M.R.C.S.

Assistant-Surgeon, R.N.—If the bones of the pelvis be involved along with the head of the femur, there will be, of course, but a very poor prospect from the operation in question.

Glasguensis.—Oak-bark, oak-galls, tormentilla, &c. &c.

A Member.—The Hunterian Oration was delivered last February. Mr. Hilton will be the next orator. The first Hunterian Oration was delivered in 1814 by Sir Everard Home, Bart.

Enquirer.—It would not exempt him from the preliminary examination.

TEST OF ATMOSPHERIC IMPURITY.

To the Editor of THE LANCET.

SIR,—Will you permit me, through your columns, to inquire whether any of your readers has ever repeated, or heard of having been repeated by others, and with what results, the experiment for determining, by means of a standard solution of permanganate of potash, the amount of organic or oxidizable impurities present in various atmospheres, which, on the sole authority of Dr. Angus Smith, have been so generally accepted as reliable, and so frequently quoted by writers on sanitary subjects?—Yours obediently,

London, April 24th, 1866. AIR-TEST.

Mr. W. Jones.—We shall be glad if our correspondent will furnish us with the particulars of the case in question, as it may possibly form an exception to a generally recognised custom, that the physician in a medical case is mainly responsible for the results of an operation performed at his request by a surgeon whom he has called to his aid in the treatment of disease.

E. C. P. should memorialize the Court of Examiners, who would probably admit him to an examination, which would no doubt be, under the circumstances of the case, of a strictly practical character.

A Young Naturalist.—They are termed, properly enough, "appendages of the integument."

PRESERVATION OF MILK.

To the Editor of THE LANCET.

SIR,—I believe medical men will be pretty generally of opinion that a process capable of securing milk against the contingency of growing sour presents great advantages, and more especially now that by far the greater portion of milk used in cities and considerable towns is obtained from the country. In the belief that such a process is easy of accomplishment, I take the liberty of explaining, through your excellent journal, its nature.

Premising that the agent used is sulphite of soda, let me state that some years ago I was much interested in the employment of sulphurous acid and the sulphites in processes of sugar manufacture. In the course of my investigations I desired to obtain a specimen of cane juice from the West Indies unchanged, and easily accomplished the desideratum by causing a specimen of juice to be impregnated with sulphurous acid. It bore the voyage from Barbadoes to Cork unchanged, as best evidenced by the fact that the normal weight of sugar was extracted from it. So strong an evidence in favour of the anti-fermentive qualities of sulphurous acid was impressive. Therefore when lately consulted by a London purveyor of milk relative to the troubles he experienced from fermentive and putrescent causes, the experiment with sugar-cane juice naturally came to mind. For many reasons, some of which will be obvious to your readers, uncombined sulphurous acid would in the case of milk have been ineligible. Sulphite of lime was first used, but with indifferent success. Sulphite of soda has answered perfectly. Necessarily winter is not so favourable a time as summer for establishing a crucial test. In the opinion, however, of the milk purveyor, who has tried the experiment, the results are conclusive. Judging from previous and collateral experience, I am induced to believe that one teaspoonful of saturated aqueous solution of sulphite of soda added to every gallon of milk will preserve the latter from change, for many weeks at least, in the hottest days of summer.

My medical brethren need not be reminded that sulphite of soda in the proportions noted is quite harmless, and indeed imperceptible. It is not new to therapeutics as a valuable agent in pyrosis and certain forms of dyspepsia, though in these cases I find the sulphite of lime to present advantages. Collaterally I may state my belief that the sulphites of soda and of lime are amongst the best, if not the very best, of all disinfectants. I would suggest their use in the cattle disease, not merely as external disinfectants, but therapeutically administered to affected animals.

Probably this communication has filled the space you can now conveniently spare; but on any future occasion I shall have great pleasure in supplementing any particulars that may be deemed of sufficient interest.

I am, Sir, your obedient servant,

J. SCOFFERN, M.B. Lond.,
Formerly Lecturer on Chemistry and Forensic Medicine at Aldersgate-street School of Medicine.

Cambridge-terrace, Kensington-park, April, 1866.

Mr. Searle.—The celebrated Sydenham died in Pall-mall in 1689 at his house next the "Golden Pestle and Mortar," a sign now or lately existing.

Student, (2nd year.)—Properly "morbilli" stands for measles, and "rubeola" for a bastard malady between measles and scarlet fever.

An Hospital Surgeon is thanked. A similar rumour reached us; but on inquiry we find that neither the septuagenarian nor the octogenarian is likely to resign.

ECZEMA.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if, through the medium of your valuable journal, any of your readers will inform me if it would be judicious to administer any of the arsenical preparations to a mother who, together with her infant of some five months, is suffering from eczema, and what preparation and dose would meet the required end. Your obedient servant,

April, 1866. M.R.C.S. Eng.

Mr. G. F. Wills.—As the same questions were asked by Dr. Livingstone in the last LANCET, we doubt not the information required will soon be published in our columns.

H. L., (Canonbury.)—The following are the lines alluded to:—

"The midwife laid her hand on his thick skull,
With this prophetic blessing—'Be thou dull.'"

A Parent.—A preliminary examination for membership and fellowship will take place at the College on the 19th, 20th, and 21st of June.

IS CINCHONINE ANTIPERIODIC?

To the Editor of THE LANCET.

SIR,—Having for a long time used the muriate of cinchonine as a febrifuge and tonic with perfect satisfaction, I was anxious to test its antiperiodic power. An opportunity offered on the return of some navvies from the Smyrna and Aidin Railway. Landing in England, many had the "Turkish ague" (a severe intermittent). Some came to me; others to my friend Mr. F. Bury, at Whetstone. We both treated these men with the cinchonine, some in doses as small as two grains three times a day, and in every case the paroxysms were arrested by the first dose, and no unpleasant symptoms recurred. Its low price, its ready solubility, without the addition of acids, and its potency make it probable that it will take the place of quinine. The sulphate is difficult to dissolve. It will be interesting to receive the leaves of the cinchonas, which are said to be possessed of great medicinal properties.

I remain, Sir, yours truly,

Barnet, April, 1866. E. BAINES, M.R.C.S.

A Breeder.—A vast amount of money, labour, and ability may be spent in forming a collection of preparations and drawings of morbid anatomy. When they are put up to sale by auction, they do not fetch the price of old shoes.

J. N. K., (Horndean.)—A communication addressed to the Secretary of the Lying-in Hospital, Rotunda, Dublin, will meet with attention.

Mr. Alfred Forster.—Dissect in winter, and attend to Practical Chemistry and the Natural Sciences during the summer session.

A Provincial Fellow.—Mr. Lawrence was elected a member of the Council in 1828, and of the Court of Examiners in 1840. Mr. South was elected on the Council in 1841, and on the Court of Examiners in 1848. Both gentlemen retain these appointments.

Imperfidus.—1. Dixon, Walton.—2. Aitken, Watson.

New Regulations of the Scotch Universities.—We shall remark upon this subject in an early number.

C. C.—1. Blumenbach was at Göttingen.—2. Garth wrote the "Dispensary."

THE CATTLE DISEASE IN INDIA.

To the Editor of THE LANCET.

SIR,—Many remedies have been proposed for the cure of the cattle disease. For years there has been a very fatal malady among the cattle in this country. I am not sure if it is the same as that in Europe. Villagers have frequently brought their diseased cattle to me, and they exhibited these symptoms:—A running at the nostrils, at first watery, subsequently passing on in most cases to a thick purulent discharge; heat, pain, and cracking in the feet; diarrhœa, loss of appetite, dysentery, and death. During the whole course of the disease the animals appeared feverish; the skin was hot, and the coat staring.

The remedies I administered were very simple and efficacious. Recovery took place in all cases but one, when I myself saw the medicines given, and when they were given before the dysentery was very bad. A ball was made containing—alum, ten to twenty grains; opium, two to four grains; red pepper, twenty to thirty grains; water and flour, sufficient quantity. This was forced down the animal's throat from three to six times a day, according to the severity of the symptoms. Appetite returned after a few balls had been given, the purging stopped, and the animal then quickly recovered.

Should anyone be induced to try this simple treatment, I trust he will make you acquainted with the results. I would only beg that he will *himself* see the ball made and given, taking care that the whole of it is each time forced down the animal's throat.

I remain, Sir, yours truly,
A. M. GARDEN,
Superintendent-General of Vaccination, Punjab.

Camp Loodiana, January 18th, 1866.

Senex.—1. There are certain degrees which are registered by the Medical Council.—2. Any of the recognised Universities or Colleges in either State. 3. By passing an examination.

Dr. W. Hunter on the Forceps and Cæsarean Operation.—Since the time of Dr. W. Hunter, opinions and practice have undergone a remarkable change.

A Constant Subscriber.—The salary varies in different ships and under various owners. The engagement is usually for the voyage.

Dr. Quinlan.—The subject is noticed in the "news" of this week.

A Young Surgeon may consult Waring's Manual of Materia Medica.

J. B.—The legal preliminary examination is insufficient for a candidate who intends to enter the medical profession.

A. B. C.—Strychnia, quinine, arsenic, sulphate of zinc, &c.

THE letters of our Newcastle-on-Tyne and Aberdeen correspondents are in type, and shall appear in our next.

J. H., (Devonport.)—There is probably some inaccuracy in the statement.

VACCINATION AND NO REMUNERATION.

To the Editor of THE LANCET.

SIR,—I am sorry to learn by your journals of April 14th and 21st last that the Vaccination Bill has received the cold shoulder of not a few of the members of Parliament. How true it is that "the labourer is worthy of his hire;" and so is the "doctor of his fee;" but very many think otherwise, and therefore it is now customary for parties, respectable in one sense it may be, to call in medical men, even to serious cases, without having any idea of paying or even of giving thanks.

I am certain this is the experience of even the youngest in the profession. Such a course of conduct, to say the least of it, is low and mean, and wholly unworthy of parties who think themselves respectable, and yet can employ a gentleman as if they were bestowing a favour on him—"gratis."

As to vaccination, all general practitioners are expected to carry it out, and with which, of necessity, much labour is connected, and even expenses incurred, *mirabile dictu*, and all without a fee. *Now*, Sir, I affirm this kind of work is both annoying and insulting to a fully qualified practitioner, whose education consequently must have cost so much. Only ten or twelve days ago I had to go to Edinburgh for vaccine lymph, for which I paid sixpence per glass, and carriage there and back to my residence. At one time I vaccinated two children, filled up the necessary certificates, handed the same into the registrar. *Now*, I ask, is this fair that I should be at such trouble and expense for nothing? "Parish doctors" are all very good; but in this matter of vaccination there ought to be no distinction. Every registered and therefore qualified man should have a fee of at least 2*s.* 6*d.* for each case he successfully vaccinates, and this is little enough for the time, work, and responsibility which lie on his shoulders in the satisfactory consummation of this operation. Should the child to be vaccinated reside at a distance of three miles from the practitioner's residence, 3*s.* ought to be his fee; but if within a radius of two miles, not less than 2*s.* 6*d.* should be given.

The adoption of this plan of paying every medical man for each case he vaccinates successfully, is, in my humble opinion, the only way to give satisfaction to the profession generally.—I remain, Sir, yours, &c.,

April 23rd, 1866. A. M. R. P.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Marion Sims; Dr. J. Hughes Bennett; Dr. Tuke; Mr. J. R. Lane; Mr. Weeden Cooke; Dr. Broadbent; Dr. Marcet; Dr. Paterson, Aberdeen; Dr. W. J. Moore; Mr. Marson; Mr. Greaves; Mr. Watkins; Mr. Dartnell; Mr. J. W. Smith, Coxwold; Dr. Collis; Mr. Weale; Dr. Quinlan, Dublin; Mr. Hodgkinson, Matlock; Mr. Johnston, Kolapore; Mr. Frankland; Mr. Lockhart M'Kay; Mr. Crofts; Mr. Cunliffe; Mr. White; Dr. Locking; Mr. Russell, Brackley; Mr. Franks; Mr. Harrison; Mr. Ley; Mr. Kirkman; Dr. Johnston, Edinburgh; Dr. Arnott; Lady Fox; Mr. Williams; Mr. J. Fowler, Wakefield; Mr. Lamb; Mr. Trestrail, Greenwich; Mr. Davies; Dr. Lewis, Maesteg; Mr. Funnell; Mr. Turnbull; Mr. Hartill, Willenhall; Mr. J. P. Richards; Dr. Mason, Sheffield; Mr. Cope; Mr. Wm. Jones; Mr. Woolcott; Mr. Fry; Dr. R. E. Thompson; Mrs. Clarkson; Dr. Hooper; Mr. Wills; Mr. Barry; Mr. Fawcitt; Dr. Spyers, Faversham; Mr. Herbert; Mr. Bromage, Monmouth; Mr. Docherty, Glasgow; Mr. Brazier; Mr. Crey; Mr. Worthington; Mr. Barber; Mr. Maurice; Mr. R. Hunt; Dr. Ryan; Dr. Elliston, Ipswich; Mr. Hardy; Mr. Spencer Watson; Mr. Wells; Dr. Colahurst, Keynsham; Mr. Snelling; Mr. Hubbard; Mr. Purves; L.R.C.P.; Medico-Chirurgus; Vox et Preterea Nihil; D. P.; Leander; Gamma; J. R.; A Lady, Brighton; A Junior Practitioner; Confed; Harveian Society; A M.R.C.P.; &c. &c.

THE *London Mirror* and the *Shoreditch Advertiser* have been received.

Medical Diary of the Week.

Monday, April 30.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 9 A.M. and 1½ P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. General Clinical Discussion.—Cases by the President, Dr. Leared, Dr. Tilbury Fox, and Mr. Walter J. Coulson.

Tuesday, May 1.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Annual Meeting.
ROYAL COLLEGE OF PHYSICIANS.—4 P.M. Professor Du Bois Reymond: "A Demonstration of the Difference in the Action of Acids, Alkalies, Salines, and other Substances on the Contractility of the Muscles and the Excitability of the Nerves."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, May 2.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
HUNTERIAN SOCIETY.—7½ P.M. Council.—8 P.M. Dr. R. Bennett, "On certain Derangements of the Nervous System occasioned by Shock, especially in reference to Railway Accidents."
OBSTETRICAL SOCIETY OF LONDON.—7½ P.M. Special Meeting of Council.—8 P.M. Dr. Thomas Radford: "Cases of Laceration of the Uterus."—Mr. Robert Ellis, "On Anæsthesia by Mixed Vapours."

Thursday, May 3.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Huxley, "On the Methods and Results of Ethnology."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. Berkeley Hill, "On a Case of Empyema with Fistulous Openings, Cured by repeated Evacuations of the Pus."—Mr. Haynes Walton, "On Detachments of the Retina, their Causes and Treatment, with Specimens."

Friday, May 4.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Abel, "On Substitutes for Gunpowder."
ARCHÆOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—4 P.M.

Saturday, May 5.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Huxley, "On the Methods and Results of Ethnology."

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